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How quitters navigate their social networks:
the importance of subjectivity and dynamic
interaction in smoking cessation

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For my mum, Jillian, whose love sustains me still

Abstract

There is widespread recognition of the need for preventive healthcare to support people in adopting healthy lifestyles that will reduce their risk of long term conditions such as diabetes, cardiovascular disease and cancer. In recent years, a number of observational studies have shown that social networks may play an important role in health behaviour change. Thus far, however, there has been limited success in translating these findings into effective interventions, suggesting a failure to tap into real-world social processes. The aim of my thesis is to develop our understanding of the role that social networks play in one key area of health behaviour change, namely smoking cessation, with a view to gaining insights into how networks can be better utilised to improve quit outcomes.

Whilst most research into health behaviour change is rooted in psychological theory, this study draws on a somewhat different perspective, that of social network studies in health. More specifically, it uses a longitudinal qualitative approach to investigate the role of social networks in giving up smoking. Thirteen participants from diverse sociodemographic backgrounds were recruited through three stop smoking services in central Scotland, and interviewed four weeks after quitting; nine participants took part in a follow-up interview two months later. In-depth interviews combined an interactive network mapping exercise with a detailed exploration of the complex inter-relationships between participants' social networks and their experiences of quitting. A thematic data analysis was undertaken.

Quitting was found to be enmeshed in an intricate web of social relationships and interactions. Quitters were not, though, powerless in the face of these social forces, but rather actively sought to navigate their social networks. Existing theorisations tend to view the social network as acting on a passive individual and, as such, overlook the importance of subjective meaning and dynamic interaction in shaping the quit attempt. My thesis demonstrates, however, that the mechanisms of

subjectivity and interaction operate in complex ways, encompassing a myriad of overlapping sources of meaning which include the immediate context of interactions, the wider nature of individual relationships, and the overall construction of the social network. These processes jointly unfold, moreover, as the quit attempt proceeds. Efforts to develop network-based cessation interventions must, therefore, move away from attempts to “fix” the network, and must instead seek to find ways of helping quitters to more effectively navigate their social networks.

Lay summary

Most of us know that following a healthy lifestyle, like not smoking, eating well or exercising regularly, is good for us. It can help to stop us developing illnesses like diabetes, heart problems or cancer.

We also know that changing our habits can take a bit of work but we tend to think that it's just down to us. Effort and will power are definitely important but that doesn't mean we have to do it all alone. For people who are trying to give up smoking, attending an NHS stop smoking service can increase their chances of quitting by up to four times. Not everyone, though, is successful and the NHS is constantly looking for ways to improve the support they give.

One possibility is that our family and friends might be able to help as well. I therefore spoke to smokers from the Falkirk/Stirling/Clackmannanshire area who were trying to quit with their local NHS stop smoking service. I asked them what their family and friends had said and done since they had quit. I also asked them how that had made them feel and whether they had asked anyone for help.

They told me several things. Some people had been really helpful. Others had been less so and had tried to stop them quitting, or had smoked in front of them, or had offered them cigarettes. The quitters tried not to be too harsh on these people, realising that it was hard for them too. In most cases, though, the quitters were able to work with their family and friends to make things easier. Sometimes family and friends would try to quit as well, sometimes they would watch over the quitter and make sure they didn't smoke. The key thing was that they came to an answer together that suited them.

We are now going to try and look for ways of helping quitters to work even more closely with their family and friends so that can get the support they need.

Declaration

I, Caroline Smith, declare that the following thesis has been composed by me, represents my own work, and has not been submitted for any other degree or professional qualification.

Caroline Smith

Date

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CHAPTER 1

Setting the scene

1.1 Health behaviours as a social phenomenon

Health behaviours are known to play a key role in the development of chronic disease (Scottish Government, 2009); indeed, just four specific behaviours (i.e. smoking, high levels of alcohol consumption, a poor diet, and a lack of physical exercise) have been associated with nearly half the disease burden in industrialised countries (Buck and Frosini, 2012). As a consequence, the need to encourage and support improvements in lifestyle has been placed at the heart of successive health strategies for Scotland (NHS Scotland, 2007, 2013). In their guidelines for the development of health behaviour change interventions, moreover, NICE (2007) lay out the different levels across which such interventions can take place (i.e. individual, community or population), and stress the need to take into account the ways in which the immediate social and environmental context might impact on attempts at behaviour change.

Alongside this, there is an increasing recognition of the part played by social networks in driving health behaviours. Christakis and Fowler (2013), for instance, describe the phenomenon of social contagion, whereby health behaviours (e.g. drug use or health screening) and health conditions (e.g. obesity or depression) are seen to spread across social networks from one member to the next; the rising popularity of mass behaviour change initiatives, such as Dry January (Alcohol Concern, 2015) and

Stoptober (Public Health England, 2015), is perhaps a testament to this. Moreover, dyadic level effects have, similarly, been demonstrated, with Jackson et al. (2015) finding that, among couples, people are more likely to make a positive change in their lifestyle if their partner does likewise. With these findings in mind, the overall aim of this thesis is to develop our understanding of the role that social networks play in one key area of individual health behaviour change, namely smoking cessation.

1.2 Smoking cessation as a case study

1.2.1 The continuing problem of smoking

The end of the twentieth century saw a marked change in the approach of the UK government to tobacco control; the “*Smoking Kills*” white paper (Department of Health, 1998) set out a comprehensive package of measures aimed at tackling smoking and reducing its burden on health. Among the wide range of actions identified were steps to end tobacco advertising, to increase tobacco taxation, and to prevent sales of tobacco to children, as well as mass media health promotion campaigns aimed at highlighting the risks of smoking and informing smokers about the support available to help them quit. Considerable progress has been made since then, with the latest Scottish Household Survey (Scottish Government, 2015b) showing that the proportion of adults who smoke in Scotland has dropped by a third from 31% in 1999 to 20% in 2014 (see Figure 1.1). Despite these advances, however, one in five adults continue to smoke, and within this overall figure, a strong socioeconomic trend is evident: whilst only 9% of people living in the most affluent areas of Scotland smoke, 34% of people from the most deprived areas do so (Scottish Government, 2015b).

The devastating effects of smoking on health are, moreover, well established and Doll et al. (1994) estimate that tobacco use will eventually kill one in two smokers who do not quit. Indeed, in their latest tobacco control strategy “*Creating a tobacco-free generation*”, the Scottish Government (2013) emphasise how smoking remains the leading cause of preventable ill-health and early death in Scotland, being responsible for 56,000 hospital admission and 13,000 deaths annually, and costing approximately £1.1 billion each year (ASH Scotland, 2015). They go on to argue, furthermore, that

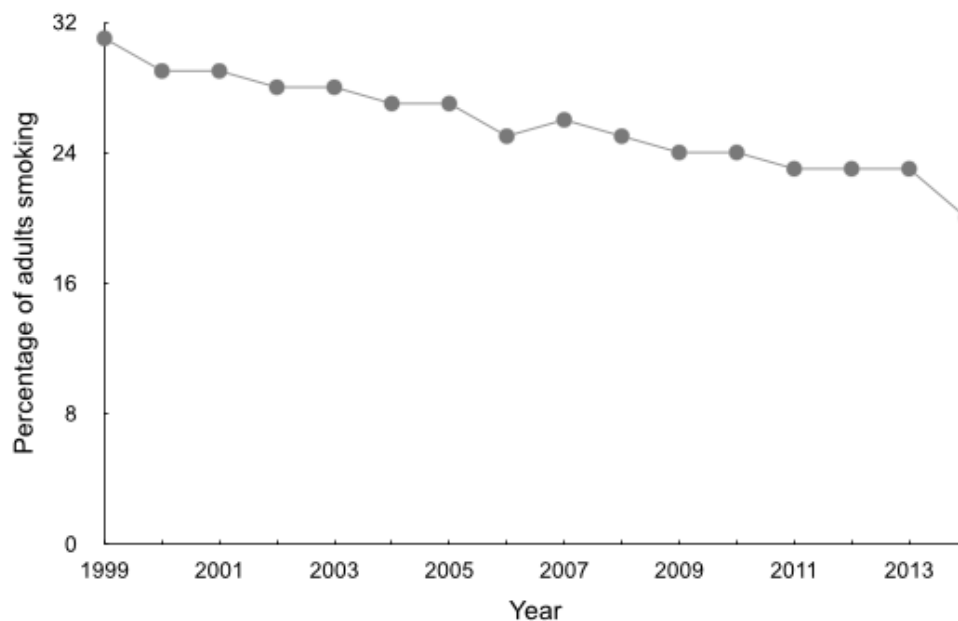


Figure 1.1: Smoking prevalence in Scotland, 1999-2014 (Source: Scottish Household Survey, 2015)

socioeconomic disparities in smoking make a clear contribution to the high levels of health inequalities seen across Scotland (Scottish Government, 2015c). As a result, “*Creating a tobacco-free generation*” puts an emphasis on tackling these inequalities in smoking, identifying the three main themes of *prevention* (encouraging young people in a decision not to smoke), *protection* (from second-hand smoke), and *cessation* (helping people to quit) as central strands in their strategy aimed at reducing adult smoking prevalence to 5% or less by 2034 (Scottish Government, 2013).

1.2.2 Encouraging and supporting smoking cessation

As a central strand in the Scottish Government’s (2013) tobacco control strategy, the focus on smoking cessation recognises that the single most important step that smokers can take towards improving their health is to give up smoking (Scottish Government, 2013): in those who give up at the age of thirty, the risk of premature death is reduced to that seen among the non-smoking population, while, in those who give up at fifty, the risk is reduced by half (Doll et al., 2004). Since the release of “*Smoking Kills*” (Department of Health, 1998), and in keeping with the multifaceted

philosophy of that white paper, the Scottish Government has sought to motivate, and support, smokers in quitting through a wide range of different initiatives (Scottish Government, 2013), encompassing a mixture of generalised and cessation-specific measures, a chronology of which can be found in Table 1.1. Examples of more generalised measures include attempts to discourage smoking through a combination of price rises and a clamping down on the illegal trade in tobacco. Efforts have also been made to change the prevailing social norms around smoking through, for instance, a complete ban on direct advertising (UK Government, 2002), the introduction of smoke-free legislation to prohibit smoking in enclosed public spaces (Scottish Executive, 2005), and the outlawing of promotional displays of tobacco products in retail outlets (Scottish Government, 2010).

In relation to smoking cessation more specifically, the “*Smoking Kills*” white paper identified funding for the establishment of a nationwide network of smoking cessation services (SCSs), backed by a set of guidelines outlining the evidence base regarding effective smoking cessation treatment (Raw et al., 1998). Introduction of these smoking cessation services in Scotland was shaped by two key publications (Health Education Board for Scotland and ASH Scotland, 2000), namely a follow-up to “*Smoking Kills*” issued by the Scottish Office (1999a), explaining how SCSs were to be implemented in Scotland, and a modified version of the guidance by Raw and colleagues (1998) adapted for the Scottish context by the Health Education Board for Scotland (HEBS) and ASH Scotland (2000).

Table 1.1: Timeline of publications and measures aimed at supporting smoking prevention/cessation. (Note that many of these measures are effective in preventing smoking uptake, and were at least partly intended to achieve this aim.)

Year	Event	Brief Description
1998	Smoking kills: a white paper on tobacco (Department of Health)	Sets out a comprehensive package of tobacco control measures, including establishing a nationwide network of smoking cessation services.

(continued)

Year	Event	Brief Description
1999	Towards a healthier Scotland: a white paper on health (Scottish Office)	Outlines targets for reducing adult smoking prevalence in Scotland. [Target: Reduce smoking among adults (16-64 years old) to 31% by 2010]; also contains initial resource allocation for SCSs.
2000	Smoking cessation guidelines for Scotland (Health Education Board for Scotland and ASH Scotland)	Provides guidance on how smoking cessation is to be delivered using a stepped care approach; also calls for cessation to be integrated into routine clinical care.
2002	Partnership Action on Tobacco & Health (PATH) established	Set up to support the implementation of tobacco control policies, including establishing a systematic process for evaluating SCSs and agreeing national training standards.
	Tobacco advertising and promotion act (UK Government)	UK-wide legislation extending the ban on tobacco advertising to cover posters, billboards and the press [Implemented in 2003].
	NRT & bupropion recommended for smoking cessation (Health Technology Board for Scotland)	NICE guidance approved for use in Scotland.

(continued)

Year	Event	Brief Description
2003	Reducing smoking & tobacco-related harm: a key to transforming Scotland's health (NHS Health Scotland and ASH Scotland)	Recommended a huge expansion in smoking cessation services.
2004	A breath of fresh air for Scotland (Scottish Executive)	First action plan on tobacco specifically for Scotland; adult smoking prevalence target lowered. [Target: Reduce smoking among adults (16-64 years old) to 29% by 2010]
	Smoking cessation guidelines for Scotland: 2004 update (NHS Health Scotland and ASH Scotland)	Recommended a shift in emphasis from stepped care to brief intervention approach; proposed that a national set of indicators be established for monitoring SCSs.
	Building a better Scotland: spending proposals 2005-2008 - enterprise, opportunity & fairness (Scottish Executive)	Target for reducing smoking prevalence among disadvantaged groups set for first time. [Target: Reduce smoking among adults (16-64 years old) from most deprived communities to to 33% by 2010]
2005	Target for smoking prevalence among adults lowered further (Beale and Sanderson)	[Target: Reduce smoking among adults (16-64 years old) to 22% by 2010]

(continued)

Year	Event	Brief Description
	National minimum dataset for smoking cessation released (Partnership Action on Tobacco & Health, PATH)	Administered centrally by Information Services Division (ISD) using web-based National Smoking Cessation Database (NSCD).
2006	Smoke-free legislation comes into force in Scotland (Scottish Executive)	Scotland becomes the first part of the UK to introduce a ban on smoking in enclosed public places.
2007	Smoking cessation update: 2007 (NHS Health Scotland and ASH Scotland)	Included extra evidence in support of the brief intervention approach; varenicline added to list of approved pharmacotherapy for smoking cessation.
2008	First HEAT (health improvement, efficiency & governance, access and treatment) target set for smoking cessation services (NHS Scotland)	Previous targets all focused on smoking prevalence rather than numbers quitting using SCSs. [Target: SCSs to support 8% of smoking population to quit (at 4 weeks)]
2010	Tobacco and primary medical services (Scotland) act (Scottish Government)	Scottish legislation banning the promotional display of tobacco brands in retail outlets [Implemented in 2013 (large outlets) and 2015 (small outlets) following a legal challenge from the tobacco industry].

(continued)

Year	Event	Brief Description
	A guide to smoking cessation in Scotland 2010 Vol. 1: Helping smokers to stop - brief interventions, Vol. 2: Planning and providing specialist smoking cessation services (NHS Health Scotland et al.)	Update of previous guidelines including latest NICE recommendations and providing separate guidance for non-specialist and specialist services.
2011	New HEAT target set for smoking cessation services (Scottish Government)	Includes explicit target for disadvantaged groups for first time. [Target: SCSs to achieve at least 80,000 successful quits (at one month) including 48,000 in the most deprived communities over the 3 years ending March 2014]
2013	Creating a smoke-free generation (Scottish Government)	New tobacco control strategy for Scotland, emphasising the need to tackle smoking inequalities and identifying three main themes of prevention, protection and cessation.
2014	Further revision of HEAT (now known as Local Development Plan or LDP) target focusing on medium rather than short-term quit outcomes (Scottish Government)	[Target: SCSs to achieve at least 12,000 successful quit attempts (at 12 weeks) in the most deprived communities over the 1 year ending March 2015; target for later years now set as sustaining current rates of quitting]

Smoking cessation services were set up in all Scottish Health Boards from 2000 and, in accordance with the HEBS/ASH guidance, were integrated into routine clinical care. In the first instance, a stepped care approach was adopted whereby the level of intervention was matched to the level of need; the majority of those seeking help to quit were managed within a primary care setting but the heaviest, and most addicted, smokers were referred to specialist smoking cessation services for intensive behavioural support. A subsequent review of the latest available evidence led to the publication of a revised set of guidelines (NHS Health Scotland and ASH Scotland, 2004) which recommended a shift in practice to a brief intervention, rather than a stepped care, approach. This revised system is still currently in place and involves the primary care team in enquiring about a patient's smoking status, and in encouraging them to give up, but not in providing active behavioural support; all those who express an interest in quitting are, instead, referred to the specialist cessation services. Current guidelines (NHS Health Scotland et al., 2010b) indicate that such specialist services, whether they be dedicated or pharmacy-based, should provide a combination of pharmacotherapy and structured intensive behavioural support (either one-to-one or group) delivered on a weekly basis across six weeks. Wide-ranging evidence is cited in this regard, showing that such interventions are effective both in terms of outcome (leading to an increase of 10–20% in abstinence rates at 6 months, and of 5–10% in permanent abstinence compared to those quitting unaided) and cost. These specialist services are now also augmented by a national telephone support line and web-based resource for the provision of information and support to those wishing to quit (Scottish Government, 2015e).

Responsibility for monitoring the outcomes and costs of the newly established services was put in to the hands of the Health Boards and SCSs themselves, and no centralised monitoring mechanism was originally set up. A subsequent mapping exercise undertaken by Partnership Action on Tobacco and Health (PATH) in 2003 identified widespread differences in the monitoring and evaluation of the Scottish cessation services (NHS Health Scotland and ASH Scotland, 2004), leading to considerable difficulties in comparing outcomes across the country. As a consequence, a data collection protocol and a national minimum dataset for smoking cessation were developed, being centrally administered from 2005 via the web-based National Smoking Cessation Database (NSCD). This collects a broad range of

anonymised, individual-level data, including indicators of the level of addiction (e.g. number of cigarettes smoked per day), details of the service attended (e.g. pharmacy-led or dedicated service), details of the type and setting of the behavioural therapy received, as well as quit outcomes at 4, 12 and 52 weeks.

1.2.3 Progress on smoking cessation

Initially, explicit targets were not set for the SCSs, instead the focus was put on reducing smoking prevalence among adults, young people, and pregnant women, as part of a wider initiative “*Towards a Healthier Scotland*” (Scottish Office, 1999b). In 2008, however, a smoking cessation target was incorporated into the HEAT (health improvement, efficiency & governance, access and treatment) performance management framework used within the NHS, requiring that 8% of the smoking population be supported to quit (at four weeks) by SCSs over the period 2008/09 to 2010/11 (NHS Scotland, 2007). At the beginning of 2011, this target was extended and, for the first time, included an emphasis on health inequalities, specifying the number of successful quits at one month that should be achieved in the most deprived communities (Scottish Government, 2011). Further modifications in 2014 saw the attention shift to medium rather than short-term quit outcomes (Scottish Government, 2014):

NHS Scotland to deliver universal smoking cessation services to achieve at least 12,000 successful quits, at 12 weeks post quit, in the 40% most deprived within-board SIMD areas (60% for island health boards) over 1 year ending March 2015 (para. 1).

Whilst the first two of these targets were easily met (NHS Scotland, 2012, 2015), the most recent was missed by a considerable margin (ISD Scotland, 2015a): of the 39,746 quit attempts recorded in disadvantaged areas, 7,017 remained abstinent at the 12-week follow-up, equating to just 58% of the 12,000 target. This shortfall appears to relate, furthermore, not to levels of quit success but to levels of recruitment (ISD Scotland, 2015a), with the overall number of quit attempts made with the SCSs declining by a third from 105,950 in 2013 to 73,338 in 2014 (ISD Scotland, 2015b). One likely explanation for this sudden drop-off in attendance might be the rising popularity of e-cigarettes (ISD Scotland, 2015a); according to the latest Scottish

Health Survey (Scottish Government, 2015c), 32% of current smokers and recent ex-smokers reported using e-cigarettes in 2014 to help them quit. Although debate continues regarding the safety and efficacy of e-cigarettes for cessation, it is perhaps concerning that quitters who decide not to attend a cessation service are also denying themselves access to the available behavioural support.

More broadly, based on the most recently published data (ISD Scotland, 2015b), quit rates achieved through the Scottish smoking cessation services ranged from 35% at 4 weeks to 16% at 12 weeks and 5% at 52 weeks. Thus, whilst the services have been shown to be highly cost-effective (NHS Health Scotland et al., 2010b), there is still room for the development of more therapeutically effective interventions.

1.2.4 The potential of social networks

In seeking to improve smoking cessation outcomes, researchers in the field of tobacco control have begun to consider how to draw upon, or modify, quitters' social networks. A wide body of observational research, rooted in the early work of Mermelstein et al. (1983, 1986) and of Cohen and Lichtenstein (1990), has suggested a link between different elements of the social network and smoking cessation, leading to an increased focus on the development of network-based interventions that aim to increase the levels of social support available to the quitter (May and West, 2000; Westmaas et al., 2010). Typically, these interventions have looked to augment the social network by providing a support partner, such as a family member or friend, with quit-related advice, information or training. A review by Park et al. (2012) has shown, however, that to date these interventions have proved largely unsuccessful; Westmaas et al. (2010) argues that these disappointing results may stem from the lack of a clear theoretical base to much of this research. Here, two rather contrasting perspectives may be of assistance, each of which is underpinned by a long history of conceptual development: sociological approaches that seek to understand the behaviour of the network as a whole (Smith and Christakis, 2008); and epidemiological or biomedical approaches that essentially consider the network to be a property of the individual quitter (Berkman and Glass, 2000). In recent years, moreover, there have been calls for research that brings together these two distinct approaches (Berkman and Glass, 2000).

There is also evidence, furthermore, to suggest that social networks may play a part in explaining the strong socioeconomic gradient that exists in relation to quit outcomes. An analysis of the *Smoking Toolkit Study* by Kotz and West (2009), for example, found that while smokers from lower socioeconomic groups are as likely to try to give up, and as likely to make use of the behavioural and pharmaceutical support available to them through the NHS, they are much less likely to succeed (20% quitting in social class I/II compared to 11% in social class V). A number of possible explanations have been identified in this regard, including lower rates of treatment compliance in disadvantaged quitters (Hiscock et al., 2011), together with greater levels of nicotine addiction and a greater concentration of smoking amongst family and friends (Hiscock et al., 2015; Hitchman et al., 2014a). This latter finding, hinting at the importance of the social network for cessation, is further reinforced by studies showing that lower socioeconomic status groups are less likely to feel that smoking is considered unacceptable by network members, less likely to experience pressure to quit and less likely to receive network support in any quit attempt (Edwards et al., 2007; Sorensen et al., 2002), although it remains to be seen whether the results of these older studies apply in countries, such as Scotland, that have introduced a ban on smoking in enclosed public spaces (Scottish Executive, 2005).

In summary, therefore, we can see that, for a variety of reasons (both policy and research-related), smoking cessation provides an ideal case study from which to take forward an exploration of the role of social networks in health behaviour change:

- (1) Smoking continues to be a leading cause of ill-health and premature death;
- (2) There is a well-established recognition of the need to support quitters in their attempts to give up smoking;
- (3) Whilst existing interventions are effective both in terms of outcome and cost, there is still scope for further improvement;
- (4) The apparent switch away from cessation services to e-cigarettes may reduce quitters' access to behavioural support;
- (5) Social network-based approaches to cessation have potential but, as yet, attempts at developing interventions of this nature have been unsuccessful;
- (6) Various authors have suggested that social networks may help to explain the socioeconomic gradient in quit outcomes.

1.3 Outline of thesis

In this thesis, therefore, I present an exploration of the relationship between social networks and smoking cessation, combining a review and analysis of the literature, an in-depth qualitative study of quitters using NHS stop smoking services, and critical reflections on the current state of theory and research in this important area. In doing so, I position this research at the intersection of two distinct disciplinary perspectives, namely a biomedical focus on smoking cessation interventions and a social science focus on social networks. My thesis, moreover, falls into three main parts, the first of which (Chapters 2–3) seeks to introduce the reader to the field and to highlight those areas in which our thinking is currently underdeveloped. The middle part of the thesis (Chapters 4–8) turns to my own study, outlining the research methodology used, providing an insight into the participants' wider lives and social worlds, and describing my detailed empirical findings. I then conclude, in Chapter 9, by considering the implications of these findings for future work around social networks, smoking cessation and health behaviours more generally.

Chapter 2: The opening chapter begins with an overview of the field of social network studies in health, concentrating on the major challenges (theoretical, methodological and empirical) that characterise our attempts to develop a comprehensive understanding of the ways in which social networks and health are linked. I start by considering the nature of social networks, outlining the various approaches that have been taken to their capture, and arguing that the social network is fundamentally a complex and multidimensional phenomenon. I then turn my attention to the relationship between networks and health, both examining the evidence for a causal link and exploring the mechanisms by which they are thought to be linked, highlighting how existing conceptual models might benefit from an additional emphasis on health behaviour change.

Chapter 3: Next, I focus more specifically on the literature that looks to elucidate the links between social networks and smoking cessation, again considering separately that research which aims to establish a causal link and that which aims to shed light on the underlying mechanisms. Overall, the picture that emerges is somewhat unclear, with considerable variability and a lack of consistency in the findings, leading me to call for a paradigm shift in our thinking, advocating instead an approach that seeks to embrace, rather than control for, network complexity. With this in mind, I further

argue the need for qualitative research in which the emphasis is on exploration and theoretical development, and propose my own study with the following objectives:

- Objective 1:** To consider how our conceptual understanding of the mechanisms linking social networks and health behaviour might be extended to better reflect the challenges of smoking cessation and individual health behaviour change.
- Objective 2:** To investigate the processes by which the different elements of the social network combine to jointly influence smoking cessation.
- Objective 3:** To explore the ways in which the smoker and their social networks together adapt and change over the course of a quit attempt.
- Objective 4:** To identify areas in which existing methods for the study of social networks and smoking cessation might be expanded and enhanced.
- Objective 5:** To gain insights into how smoking cessation interventions might be developed to more effectively harness social networks in order to improve quit outcomes.

Chapter 4: From here, I go on to describe my methodological approach, outlining the overall research design, the specific data collection methods, and the recruitment procedures used. Consideration is then given to the nature and adequacy of the study sample in relation to the study objectives, with particular attention being paid to the sampling frame. In the remaining sections of this chapter, I detail my inductive analytic approach, touching upon the likely validity and generalisability of the results, and finish by reflecting on my role as the researcher and the ways in which this might have impacted on my findings.

Chapter 5: The first of the results chapters aims to introduce the participants to the reader, seeking to give an insight into the day-to-day routines and challenges that provide the backdrop to their attempts at stopping smoking. Within this, I look both at their social worlds, building a picture of their family and friendship networks, and at their smoking worlds, describing the times, places and people around which they organised their smoking, and exploring the extent of smoking and quitting among their social network members.

At this point, I come to the main findings of this study. Three primary analytic themes are identified with each theme referring to a different dimension of the interactions

that take place between a quitter and their social networks; these themes are explored in turn in the following three chapters.

Chapter 6: First I focus on the ways in which participants sought to make sense of these interactions, highlighting how their understandings in this regard were highly sophisticated, moving as they did between different levels of *meaning*. The simplest of these involved an emphasis on the individual actions of social network members, and encompassed both descriptive and evaluative components. Beyond this, understandings at the level of people were seen to reflect the combined set of actions, the wider shared life history, and the degree of relevance that the network member was deemed to have in relation to the quit. Accounts at the level of the social network were less common but, where they did occur, they typically involved either comparisons of individual network members or references to the overall shape of their networks.

Chapter 7: This, then, brings us to the second analytic theme of quitter *agency*, the active management of social networks by participants seeking to get the help they needed. Two broad types of strategy were in evidence here: on the one hand, quitters attempted to alter the structural composition and functional behaviours of their networks; and, on the other, they sought to find ways of maintaining, and strengthening, their own internal personal resources and of protecting themselves against potentially negative responses from family and friends.

Chapter 8: The last results chapter focuses, in contrast, on the *changes* that occur in network interactions as a quit progresses, with both the quitter and their social network members modifying their behaviour at different stages of the quit process. Participants' own attitudes were seen to develop along a trajectory from an initial guardedness at being in the presence of smokers, through general disapproval of smoking and smokers, to a calm acceptance of smoking and non-smoking environments alike, while gradual reductions in the levels of interest and support from family and friends were common as the quit unfolded. Participants who had relapsed, furthermore, were tentative about widespread disclosure, in part fearing judgement and in part being concerned not to jeopardise the quit attempts of their network members.

Chapter 9: Finally, in chapter 9, I draw together the various strands of this thesis, making connections between my own results and existing conceptual models and

empirical findings, and suggesting ways in which the field can now be taken forward. More specifically, I identify a need to better reflect the breadth and complexity of the social network, to develop our understanding of social influence as a bi-directional process, and to extend current conceptualisations of the network to include a third key component, namely network meaning, alongside the more recognised elements of structure and function.

CHAPTER 2

Social network studies in health

2.1 Introduction

I shall start with a brief introduction to the field of social network studies in health, a rather broad area that takes in researchers from a wide variety of disciplines, including public health, epidemiology, health psychology and sociology. Given the extensive nature of this literature, it is not my intention to attempt a comprehensive review, but rather to build a general picture of current thinking and knowledge in relation to social networks and health, such that it can provide both a framework from which to evaluate the somewhat narrower literature on social networks in smoking cessation (see Chapter 3), and a theoretical base for my own study. I shall, moreover, divide the chapter into two main sections, the first looking at the nature of social networks and the ways in which researchers have sought to capture them (Section 2.2), and the second focusing on the relationship between social networks and health (Section 2.3). More specifically, I shall begin by considering what we mean by the term *social network*, showing that various approaches have been taken to its definition, with this lack of consensus arising from differences in its conceptualisation, in the network dimensions that have been investigated, and in the changing social and cultural trends in which our social relationships are embedded (Section 2.2.1). I shall then go on to argue that a social network is a complex, multidimensional construct that is itself made up of a hierarchical system of

increasingly specific sub-concepts, each of which involves its own methodological and measurement approach (Section 2.2.2). In the latter half of the chapter, my attention will shift to the body of literature that has looked to explicate the role that social networks play in helping to shape health. Here, researchers have looked both to establish a link between networks and health (Section 2.3.1), and to understand the mechanisms that underpin any such relationship (Section 2.3.2).

2.2 Capturing social networks

2.2.1 The challenge of defining social networks

Social network: n. a system of social interactions and relationships; a group of people who are socially connected to one another; (now also) a social networking web site; the users of such a web site collectively. OED Online (2015)

We can clearly see from the latest OED Online (2015) entry that the term *social network* holds different meanings for different people in different contexts. Thus, in some cases, the term is equated to online social networking sites, such as Facebook. In others, the emphasis is on a set of individuals who are inter-connected in some way, whether this be online or in the real world. And in others still, the term is linked to particular set of analytical tools used in the mapping and measurement of network structure (Edwards, 2010). Whichever definition is adopted, there appears to be a common misconception that the social network is a relatively recent construct, an assumption that is strongly disputed by several authors (Edwards, 2010; Heath et al., 2009; Hollstein, 2011) who point to a long tradition of social network research spreading back over 80 years, which has its early roots in the work of the psychiatrist Jacob Moreno. Borgatti (2009) describes how, during the 1930s, Moreno pioneered the use of sociometry (a form of graphical representation) in attempting to understand the reasons behind a spate of runaways from boarding school in Hudson, New York; he found that it was the social connections between the pupils, rather than their individual characteristics, that determined whether or not they absconded. Two decades later, ethnographical studies by the anthropologists John Barnes and

Elizabeth Bott (as outlined by (Berkman and Glass (2000))) demonstrated that traditional analyses concentrating on kinship or the local community were inadequate in explaining individual behaviour, leading them to propose the broader concept of the social network which was less rigid and more flexible than these pre-defined, bounded groupings. Recent technological advances have since made possible the development of sophisticated mathematical techniques for the description, visualisation and interrogation of social network data (Hanneman and Riddle, 2005), resulting in the current predominance of formal social network analysis.

More widely, though, it is apparent that social network research has overlaps with many other areas of enquiry, including those focused, for example, on family or friendship groups. Indeed, Berkman et al. (2000) highlight the particular relevance of Durkheim's famous study of the social patterning of suicide in Western Europe during the late 19th century. Dillon (2010) describes how in this study married people were found to be less likely to take their own lives than single people, and levels of suicide were shown to decline with increasing numbers of children, which Durkheim took to indicate that having a responsibility towards others served as a regulatory influence on behaviour. From this brief history, therefore, a picture begins to emerge of a highly diverse area of study in which the social network is a somewhat contested term that encompasses various conceptualisations and various objects of study, whilst at the same time reflecting wider social and cultural contexts. I shall begin, therefore, by taking a more in-depth look at each of these areas of contention, with the aim of articulating the particular definition of the social network that I shall adopt throughout this thesis.

First, there are major conceptual differences in the way that social networks are characterised. Many epidemiological researchers, for example, assume a generic definition (often implicitly) that conceives of the network as encompassing all aspects of our social relationships; in this view, moreover, terms such as social integration and social support are commonly used interchangeably with that of social network (House et al., 1988b; Smith and Christakis, 2008). Within sociology, in contrast, the term is often seen as having a more tightly defined meaning: Christakis and Fowler (2009), for instance, describe a social network as comprising a group of people who are joined by a set of connections or ties. They stress, furthermore, that the behaviour of the network is not simply determined by the characteristics of individuals within it but also by the specific patterning of ties that bind the network members together. For

House et al. (1988b) and O'Reilly (1988), therefore, the term social network is synonymous with the structural element of our social relationships; here the emphasis is on understanding how social networks are constructed, with particular reference to exploring the nature of ties at both the dyadic and supradyadic level (see Section 2.2.2 for a more detailed discussion). This, in turn, leads to an even more precise conceptualisation in which the term social network is equated, as we have seen above, with a specific methodology (formal social network analysis) aimed at capturing network structure. This debate is not, however, merely about labels; at the core of the argument is a concern that the confusion caused by a lack of definitional specificity frequently leads to key dimensions of the social network, and particularly its structural components, being overlooked.

Alongside these conceptual differences, there is also considerable variation in the chosen objects of study, with some focusing on the influence of the network on the individual (mostly commonly within the quantitative tradition of seeking to establish cause-effects relationships), others exploring the internal workings of the group (often adopting qualitative methodologies), and others still examining the structures and behaviours of the network as a whole (usually through the application of formal social network analysis techniques). Moreover, there are widespread differences in the kind and range of relationship types that are typically studied. Thus, as Berkman and Glass (2000) outline, the emphasis for Barnes and Bott was on looking beyond traditional kinship boundaries to explore the importance of other social ties, a view that has since been supported by studies such as that by Wellman and Wortley (1990), who not only found that friends and neighbours are also instrumental in providing social support, but that different types of relationship are associated with giving different types of support.

Others, in contrast, argue that the family has become “*one of the building blocks of social scientific enquiry*” (McKie et al., 2005, p. 3) and, as such, there is now an extensive research literature on families, albeit not one that explicitly labels itself as social network research. This literature covers, furthermore, a diverse set of issues including, but not limited to, the identification and description of different family typologies (Fisher and Ransom, 1995), the exploration of changes in family composition and family relationships (Widmer et al., 2013; Weeks et al., 2005) in response to significant life events, and the analysis of the links between family and health (Fisher and Ransom, 1995; Repetti et al., 2002). There is, nevertheless, a

degree of overlap between these two approaches, with many social network researchers explicitly including family in their analyses of the wider network (Sneed and Cohen, 2014; Glass et al., 1997), and many family researchers recognising the importance of non-familial relationships (Bonvalet and Lelievre, 2013). Interestingly, a review of the literature on adult relationships (Fingerman and Hay, 2002) found that studies of friendship were relatively uncommon compared to those of family and, even in those cases where such analyses were undertaken, they were predominately restricted to young people who were below the age of thirty.

Objects of study differ further with regard to whether they focus on a specific type of action in isolation (for example, the provision of social support) or whether they seek to reflect the wider relationships within which these solitary actions are embedded. While the former approach largely predominates in the literature, authors such as Fuhse and Mutzel (2011) stress the importance of taking a broader view, arguing for the use of qualitative methodologies in understanding the subjective meanings that people attach to their social relationships, and in exploring how the perceptions and expectations that we have of network members can influence the ways in which we understand their individual actions. In a related but slightly different vein, various authors have also noted the relevance of the life course perspective in social network research. While Antonucci et al. (2014), for example, consider shared experiences to be the building blocks of our social relations, others (Huinink and Feldhaus, 2009; Macmillan and Copher, 2005), drawing on Elder's (1994) *linked lives* principle, stress the importance of dynamic inter-relationships between social network members in shaping the life course. Thus, the meanings that people attach to their social networks, in the here and now, can be seen as being a product of their accumulative joint life histories.

It is evident, therefore, that the considerable ambiguity surrounding the term social network stems both from a lack of consensus regarding its conceptualisation and from widespread variation in the specific aspects of our networks that researchers in the field have elected to study. This situation is further complicated, moreover, by changing social and cultural trends which provide the backdrop to all of our social relationships. In the above OED Online (2015) entry, for example, we saw that a clear distinction was drawn between real-world and online social networks; increasing interest is, though, now being shown in the interplay between the two, with Kujath (2011), for instance, finding that Facebook and MySpace are typically used to

maintain existing real-world relationships as well as to forge new online ones.

Stark changes in the conceptualisation of family have likewise been evident over the last 60 to 70 years. We all have an implicit understanding of what is meant by *family* but, on closer inspection, we can begin to see that providing a clear definition is less than straightforward. For several decades after World War Two, the concept was equated (Bonvalet and Fernandez Cordon, 2013), in Western societies at least, to the *nuclear family*, namely a married man and woman, together with their children (International Encyclopedia of the Social Sciences, 2008b). These perceptions began to shift, however, with a rise in cohabitation and divorce, leading to an increasing recognition that the rather simplistic ‘nuclear family’ concept was too narrow to adequately reflect the growing diversity in family composition. Alternative configurations, such as that of the *extended family*, were instead described which incorporated kinship groupings outwith the parents and children (International Encyclopedia of the Social Sciences, 2008a). Such broad family units were seen as encompassing many different relationship types, including those that are co-sanguinous (related by blood), affinal (related by marriage) and fictive (for example, godparents or best friends). Furthermore, such families were sub-divided into those that extended lineally to include three or more generations (for example, grandparents) and those that extended co-laterally to include kin who belong to the same generation as the parents (for example, aunts and uncles). More general definitions of family, meanwhile, sought to encapsulate the notion of the household, along with a broader range of kinship relationships. Ross and colleagues, for example, describe how the U.S Bureau of Census defined family as “*two or more individuals related by blood, marriage or adoption who reside in the same household*” (Ross et al., 1990, p. 1059); this approach could be seen, therefore, to capture, within a single definition, a much wider range of family structures, including single-parent families and married couples without children.

More recently still, various authors (Bonvalet and Fernandez Cordon, 2013; Widmer et al., 2013) have argued that these more relaxed definitions, nevertheless, still fail to capture the reality of contemporary family life which often involves an intricate web of relationships that extends beyond the boundaries of the household. Thus, the concept of the extended family has been further developed to distinguish between family units that live in the same household, and those whose members live apart but continue to provide each other with practical and/or emotional support. Gordon

(1972) refers to these latter groupings as *modified-extended* families, whereas Willmott (1988) separates *locally extended* families, those who live in close proximity to each other, from *dispersed extended* families, where direct contact is less frequent. Others, though, contend that it is inappropriate to seek definitions for either the general concept of family, or for particular configurations of it, since this inevitably gives a legitimacy to some family forms at the expense of others (Bernades, 2008). Some, therefore, instead follow the approach of Barnes and Bott, as described by Berkman and Glass (2000), focusing on close and primary relationships more generally, whilst others, such as Widmer (2006), advocate allowing participants to adopt their own definitions of family.

Before concluding this section, it is worth noting that the definition of the term *friend* is equally complex, with wide variations in the individuals who are thus classified (van der Poel, 1992). While Fischer (1982), for example, found that respondents are unsystematic in the way they use the concept, they do nevertheless commonly use three criteria to adjudge friend status, namely: closeness in age to the respondent, length of time known to the respondent, and the nature of the relationship with the respondent (friends are typically those people with whom the respondent socialises). Furthermore, the label friend is most likely to be applied to those people who do not fall into another relationship category, such as neighbour or work colleague. More recently, Agneessens et al. (2006) has shown differences in the type of support that respondents anticipate from their friends, with some expecting both emotional support and companionship, others expecting companionship only, and others still expecting no support at all; instrumental support, such as practical help when ill, is not however associated with friendship. Kirke (1996) suggests that defining the term is particularly problematic for adults as they have had the opportunity to develop friendships in multiple contexts across their life course, for example, at school or college, in the places they live and work, and through romantic attachments.

As a result of these difficulties in definition, there has been a tendency over the last 30 years for social network researchers to avoid the term friend, instead using more indirect questioning strategies that focus on specific social exchanges, such as who the respondent would confide in about an important personal matter (Burt, 1983). While these approaches do help to reduce ambiguity and to improve robustness, Kirke (1996) points out that they have been developed to allow the study of social support, rather than friendship, networks. Moreover, as people do not necessarily associate

social exchanges (such as instrumental support) with friendship, these techniques are not best suited to the study of the latter type of network. Kirke (1996), therefore, argues that the concept friend does still have a place in social network research so long as care is taken in understanding the meaning attached to the term.

In summary, this section provides a somewhat brief, yet broad, overview of the challenges inherent in defining what we mean by social networks. Whilst a full critique of all the issues is beyond the scope of this doctoral thesis, my aim has been to provide sufficient insight to allow the situation of my research within this wider debate. It is, nevertheless, still incumbent upon me to explain my use of the term as no existing definition precisely captures those characteristics of the social network that I consider most important. For the purposes of this thesis, I have chosen to adopt the definition used by Smith and Christakis (2008), who describe a social network as being “*the web of social relations around an individual*” (p. 407). This relatively simple definition manages to capture a sense of the embeddedness and dynamic interaction that I suggest are key components of our social relationships. I refocus Smith and Christakis’s definition, however, moving the emphasis away from network structure to a broader view that sees this web of relations as incorporating the multitude of different elements that make up our social worlds. I believe that this more encompassing approach will have particular utility within the current study, which explores smoking cessation in *individuals*, as it seems unlikely that an emphasis on network structure alone will enable a full exploration of the role of social networks in individual health behaviour change.

2.2.2 Social network concepts, measures & methods

Implicit in my above discussion about the difficulties inherent in defining the term *social network* is the idea that, far from being a single, well delineated concept, a social network is in fact a complex and multidimensional phenomenon that encompasses many different aspects of our social relationships (Glass et al., 1997). Over the past 30 years, there have been many attempts to tease out and articulate these various meso-level concepts, including one particularly important contribution by House et al. (1988b), which identified three broad social network components. At the most basic level, *social integration* was viewed by House and his colleagues as being the existence of social ties, and the reverse concept of *social isolation* was seen as being a complete lack of such ties. Beyond this, social networks were conceived as

being comprised of two separate, but nevertheless interlinked, elements: *network structure* which was defined, in a somewhat circular fashion, as being “*the structure which characterises a set of relationships*” (House et al., 1988b, p. 302); and *relational content* which was used to refer to the quality of social ties or, in other words, to the *functions* that these ties perform.

Although thinking has continued to evolve since this early discussion paper, there still remains a broad agreement about the relevance of the structural/functional split, although there has been some refinement of the specific definitions. Thus, Due et al. (1999) moved beyond the rather opaque definition provided by House et al. (1988b) to conceptualise structure as being “*the individuals with whom one has an interpersonal relationship and the linkages between these individuals*” (p. 662), while Christakis and Fowler (2009) went further still, emphasising that the structure of a network lies in the way that its constituent parts (i.e. people and ties) are organised or, more specifically, in the patterning of the ties that hold the individual network members together. In relation to network function, Due et al. (1999) similarly proffered a more precise definition “*the interpersonal interactions within the structure of the social relations*” (p. 663), highlighting that function covers both the behaviour of the network and the flow of social resources within it.

There has, in contrast, been more divergence of opinion around the concept of social integration and, while authors such as Heaney and Israel (2008) have adopted the relatively simple description put forward by House et al. (1988b), others have suggested more complex definitions which focus, for example, on the degree of participation in social relationships (Umberson and Karas Montez, 2010), or on the extent to which individuals are embedded within society and are, thus, constrained by their connections to other people (Dillon, 2010). Although on first reading these definitions may appear to be broadly similar, they do in fact reveal fundamental differences in the underlying construct. On the one hand, it can be argued that the “existence of ties” definition advocated by House et al. (1988b), and indeed variations upon it which incorporate the frequency of contact and the number of social roles (Berkman and Syme, 1979), can be appropriately subsumed under network *structure*. On the other hand, the definitions suggested by Umberson and Karas Montez (2010) and Dillon (2010) point to the importance of social engagement and social influence, both processes that might be thought of as falling under the banner of network function. These latter definitions can be seen to overlap, moreover, with the related

concept of social capital which Kawachi and Berkman (2000) define as “*those features of social structures - such as levels of interpersonal trust and norms of reciprocity and mutual aid - which act as resources for individuals and facilitate collective action*” (p. 175).

Many social network conceptualisations, therefore, include just two main subcomponents (structure and function), with social integration being variously classified under network structure (Holt-Lunstadt et al., 2010) and network function (Due et al., 1999). Articulation of the social network concept does not, however, stop here since below each of these meso-level constructs lie further conceptual layers of increasing specificity. Indeed, authors such as Berkman and Krishna (2014), Due et al. (1999) and Heaney and Israel (2008) have identified a broad range of these more low-level network components, taking in aspects of structure (e.g. reciprocity & density) as well as function (e.g. social influence & undermining). With this in mind, I have developed an outline conceptual framework for use throughout this thesis which attempts to bring together the work of House et al. (1988b) and subsequent authors into a single, unified framework, focussing on those most commonly described elements of the social network (Figure 2.1).

Looking first at network structure, a vast array of different concepts and measures have been described (Hawe et al., 2004), with these typically being divided into those that apply to the individual ties that connect a dyad together, and those that relate to the way in which the network as a whole is organised (House et al., 1988b). Rather than attempt to give an exhaustive account here, I will instead focus on a few specific examples in order to illustrate the wide range of structural features that it is possible to consider. In terms of dyadic ties, also referred to by O'Reilly (1988) as the “*interactive dimensions*” of social network structure, the simplest draw on everyday notions of what characterises our interpersonal relationships, such as the frequency of contact and the length of time for which we have known someone (duration). While tie strength might equally be thought of in generally lay terms, Granovetter (1973) has sought to provide a more precise definition: “*the strength of a tie is a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterise the tie*” (p. 1361), which demonstrates well the multidimensional nature of this apparently straightforward concept, and provides a link to the more specialist construct of *reciprocity* or the degree of mutuality in the dyad. Beyond this, a whole set of

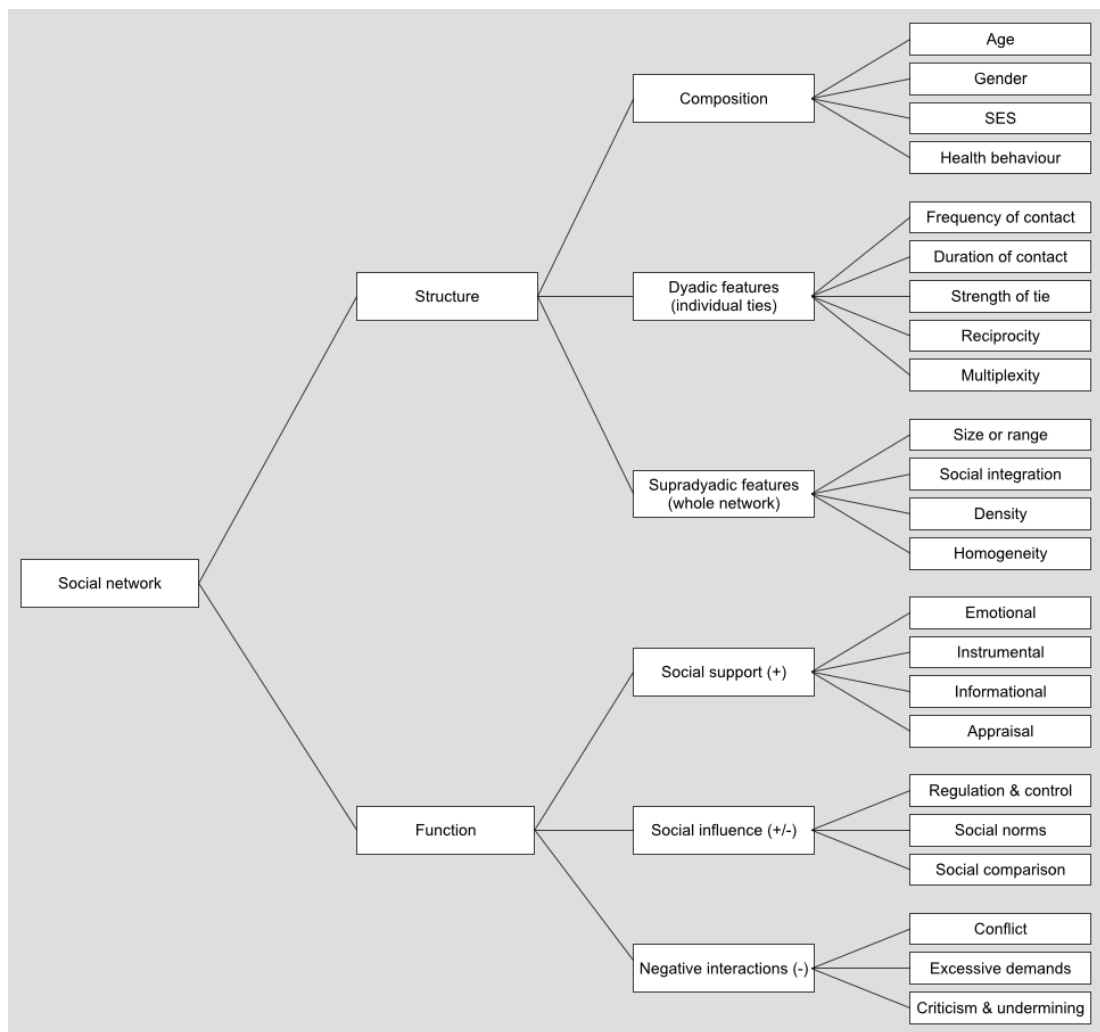


Figure 2.1: A framework for conceptualising social networks

technical concepts seek to capture those tie features that are not so immediately obvious, such as *multiplexity*, which refers to the number of different connections that exist between a dyad pair (Hanneman and Riddle, 2005), where two people may, for instance, be linked both by virtue of being neighbours and by being work colleagues. Supradyadic concepts, likewise, encompass a variety of everyday and technical constructs, with the most basic including the size or range of the network, in addition to the structural components of social integration discussed above. Here, though, there is a particular focus on the more abstract aspects of network structure that relate to the overall patterning of ties: *density*, for instance, seeks to capture the extent to which individual network members have links to each other, and *homogeneity* examines the extent to which the individuals in a network have similar characteristics

(Berkman et al., 2000). This then leads us to the more compositional elements of the social network which encompass the attributes of the individual network members, for example, their socio-demographic characteristics or their health behaviours. Unlike more traditional approaches, social network analyses do not consider compositional factors in isolation but rather look to explore their influence within the context of the wider network; Christakis and Fowler (2007), for instance, have demonstrated that individual traits, like obesity, can spread from one network member to another.

Network function is similarly an umbrella concept that contains beneath it many more specific constructs that are too numerous to cover within a brief introduction such as this. These lower level constructs can, however, be seen to range across a spectrum with regards to whether they have (or are intended to have) a positive or negative influence (Heaney and Israel, 2008). Perhaps the most studied of the positive components of network function is *social support* (Smith and Christakis, 2008), a construct that, like social networks, has been variously conceptualised (Heaney and Israel, 2008). A number of common elements in its definition have, nevertheless, been identified by O'Reilly (1988) who found, following a survey of researchers in the field, that there was a degree of consensus that social support is an interactive process, which involves a set of behaviours that may have a beneficial effect on individual well-being. There was, though, greater disagreement around the specific processes, behaviours and effects that it was considered legitimate to consider. Indeed, Barrera (1986) has argued that the global concept of social support is in itself too broad, an idea that is further reflected in House (1981)'s classification of four different subtypes of support: *emotional* which involves demonstrations of love, empathy and trust; *instrumental* which covers the provision of tangible resources and assistance, such as financial help; *informational* which includes the sharing of advice and knowledge; and *appraisal* which involves the giving of evaluative feedback.

Whilst social support is viewed as being inherently positive, at least with respect to the intention of the provider (Heaney and Israel, 2008), the nature of *social influence* can be more variable, depending on the type of effect that this influence ultimately exerts. Here, House et al. (1988b) identifies the two inter-related mechanisms of *social control*, where one's behaviour is directly controlled by that of another social network member (for instance, a parent limiting the portion sizes that they give to a child), and *social regulation*, where people modify their own behaviour in order to conform with network norms, whether or not these be health promoting, possibly

through the process of social comparison (Berkman et al., 2000). At the opposite end of the spectrum to social support lie those aspects of network function that can be construed as being entirely harmful, referred to by Berkman and Krishna (2014) as *negative social interactions*. Various types of behaviour have been classified thus, with Due et al. (1999), for example, focusing on the deleterious effects of conflict and excessive demands, and Heaney and Israel (2008) stressing the importance of *social undermining* whereby network members either seek to erode self-esteem or to hamper the realisation of goals and ambitions.

To recap, we have seen that a social network is a complex, multilevel construct in which each successive conceptual layer is itself comprised of a further set of more closely defined concepts, such that the number of constituent elements fans out exponentially towards precise measures of the network, as the level of specificity increases. It is worth noting though that, whilst I have laid out my conceptual framework in a hierarchical fashion, reflecting the distinct nature of the component constructs, the different concepts do not in fact operate in isolation but are instead interlinked with, for example, functional behaviours arising from the structures in which they are rooted; a fuller explanation can be found in Section 2.3.2. Glass et al. (1997), moreover, have argued that we should seek to embrace this complexity, since a failure to do so will limit the extent to which we are truly able to understand the ways in which social networks help to shape health. For them, the social network is an abstract construct that cannot be assessed directly but must instead be captured through compound measures that correspond to different underlying dimensions of influence. Others, in contrast, have stressed the need to focus on specific components of the network rather than looking to establish global measures that are unlikely to uncover the core mechanisms. Barrera (1986), for example, emphasises the need to distinguish between perceived and actual social support, whereas Gottlieb and Bergen (2010) highlight the importance of bi-directionality in support (i.e. the need to give as well as to receive) and recommend that different sources of support, such as family and friends, are examined separately.

This complexity does not, however, end with conceptual definitions but is carried forward into the way that these constructs are operationalised within specific research studies. A review by O'Reilly (1988), for instance, found considerable diversity in the populations of interest (e.g. general or disease-specific), and thus in the elements of social support that were of particular relevance. O'Reilly, similarly, reported broad

differences in the scope of the networks being studied, with limits being variously placed on the overall size of the network, on the particular relationships of interest, and on the degree of closeness to network members. As a result, there is widespread agreement that no single measure of social networks will be suitable in all situations, and that the choice of approach should instead be guided by theoretical considerations and by the hypothesised mechanisms through which social networks impact on health (O'Reilly, 1988; Berkman and Glass, 2000).

To this end, a whole range of different instruments have been devised for the collection of data in relation to network structure and function. Formal social network analysis, for example, explores the ways in which networks are organised and structured, through the application of mathematical graph theory and matrix algebra (Hanneman and Riddle, 2005). In order to undertake such an analysis, it is first necessary to identify the people within a network and the connections between them. Here, a variety of mapping techniques are available, including egocentric and single name generators, position generators and single criterion recognition questions; while such approaches can be time-consuming, they do have the advantage of producing rich and detailed data (Berkman and Krishna, 2014). In terms of network function, a vast number of data collection instruments have been suggested for the measurement of social support. Gottlieb and Bergen (2010) recommend three such measures, in particular, for their robust psychometric properties and for their widespread relevance across many contexts: the Social Provisions Scale (SPS), a comprehensive assessment of perceived support for use in the general population; the ENRICH Social Support Inventory (ESSI), a shorter tool for the measurement of perceived support in groups suffering from chronic diseases; and the Inventory of Socially Supportive Behaviours (ISSB), a comprehensive measure of support given. More recently, tools have also been developed to capture the more negative aspects of social interactions described above (e.g. criticism and excessive demands), as well as feelings of loneliness (Berkman and Krishna, 2014).

Throughout this discussion on “*Capturing social networks*”, I have sought to illustrate the complex nature of social networks, arguing that they are multidimensional constructs which have been conceptualised, and measured, in many different ways. Given this level of complexity, I would suggest that qualitative research methods, which can help to shed light on complex social process phenomena (Curry et al., 2009), are likely to have considerable utility. Despite this, and the fact

that social network studies have their roots in the early anthropological work of Barnes, Bott and Mitchell (Hollstein, 2011), quantitative approaches have nevertheless become predominant (Edwards, 2010). This is, perhaps, particularly apparent in the study of social networks and health; in their original overview of the subject, for example, Berkman and Glass (2000) made no reference to qualitative approaches, and in an update nearly 15 years later, there was merely a solitary brief reference (Berkman and Krishna, 2014). More recently, however, various authors have begun to call for the increased use of qualitative methods in order to allow a greater focus on dynamic interaction and meaning (Edwards, 2010; Fuhse and Mutzel, 2011). This is an issue to which I shall return in Chapter 4.

2.3 Social networks & health

2.3.1 Establishing a link

Having thus looked at the nature of social networks in general, the focus of this chapter shall now shift towards the relationship between social networks and health. Such an association has been long reported (House et al., 1988a), with some of the earliest evidence being provided, as we have previously seen in Section 2.2.1, by the sociologist Durkheim (1951), who demonstrated a link between levels of social integration and rates of suicide. In the ensuing decades, researchers continued to amass evidence of an association (Kohn and Clausen, 1955; Kraus and Lilienfeld, 1959), but the explanation and interpretation of these results proved more problematic; the preponderance of studies that relied on either cross-sectional or retrospective designs meant that it was impossible to establish a cause-effect relationship (House et al., 1988a). It was not until nearly 80 years after Durkheim that the debate began to move forward with the publication of two reviews by Cassel (1976) and Cobb (1976), in which they each independently sought to synthesise the findings from a heterogeneous set of studies. They found that, despite the methodological limitations of the individual studies, the overall pattern of results was remarkably consistent, leading them to conclude that social networks may, indeed, have a causal impact on health. Their observations led them to hypothesise, moreover, a possible mechanism of action, suggesting that social support might provide protection against the negative effects of psychosocial stress (House et al., 1988a).

In the decade following the reviews of Cassel (1976) and Cobb (1976), there was an exponential increase in research exploring the link between social networks and health, with a particular emphasis on prospective studies that sought to confirm a causal relationship, and on field and laboratory experiments that attempted to shed further light on the mechanisms responsible for any such effect (House et al., 1988a). Since then, a vast and complex body of literature has continued to be built up, covering a wide range of social network measures and health outcomes, a diversity that is well exemplified within a recent special issue of the journal *Health Psychology*, containing seven very different network studies (see Table 2.1 for details). Across just this small collection of papers, measures such as network size (Marquez et al., 2014), social support (Chang et al., 2014) and negative interactions (Sneed and Cohen, 2014) were explored with reference to health behaviours (Sorkin et al., 2014), as well as to various aspects of physical (Cheng et al., 2014; Crittenden et al., 2014) and mental health (Bookwala et al., 2014). Despite the diversity evident across this enormous literature, a number of key themes have emerged.

Table 2.1: Details of articles in special edition of *Health Psychology* (2014)

Authors	SN Component	Specific Measure	Health Outcome
Marquez et al.	Structure	Network size	Health behaviour
Crittenden et al.	Structure	Social integration	Pulmonary function
Bookwala et al.	Structure	Having a confidante	General physical & psychological health
Cheng et al.	Structure	Network type	Pulmonary function
Sorkin et al.	Function	Social support, control & negative interactions	Health behaviour
Chang et al.	Function	Social support & negative interactions	General physical & psychological health
Sneed & Cohen	Function	Negative interactions	Hypertension

The strongest evidence in support of a causal link comes in relation to social integration and all-cause mortality. Seminal work by Berkman and Syme (1979) involved a prospective population-based study in which almost 7,000 adults were

followed-up for nine years. Various information regarding the nature of their social ties was collected at baseline and used to compile a composite *Social Network Index*, encompassing four separate domains: marital status; number of, and frequency of contact with, close family and friends; church membership; and affiliations with other formal and informal groups. The age-adjusted relative mortality risk for those individuals who were most socially isolated, compared to those who had the most social contacts, was 2.3 among men and 2.8 among women, and these associations were found to be independent of socioeconomic status, self-reported health and health behaviours such as physical exercise, smoking and alcohol consumption. A series of further studies followed over the next decade, with each reporting a broadly similar set of results (Blazer, 1982; House et al., 1982; Kaplan et al., 1988; Orth-Gomer and Johnson, 1987; Schoenbach et al., 1986; Welin et al., 1985). While these studies all adopted prospective cohort designs, they covered many different populations with varying lengths of follow-up, and looked at different aspects of the social network, prompting House et al. (1988a) to argue, following the reasoning of Cassel (1976) and Cobb (1976), that the uniformity of the findings was strongly supportive of the hypothesis that social networks have a causal influence on mortality. In an updated review several years later, Berkman and Glass (2000) found that the all-cause mortality risk was 2.5 times higher in those people with lower levels of social integration.

Beyond these studies of overall mortality, there is also evidence that social networks can impact on specific causes of death. Berkman and Syme (1979), for instance, demonstrated increased mortality rates amongst the most socially isolated across four separate causes of death, namely ischaemic heart disease, cerebrovascular and circulatory conditions, cancer and a catchall “other causes” category. Other studies have since provided a degree of confirmation for these findings, although the picture appears to be far more complicated than this early study suggests with respect to the particular conditions that are affected. A systematic review of the literature by Lett et al. (2005) revealed that, among previously healthy individuals, those with the poorest social ties had the highest risk of death from coronary heart disease; this conclusion was, however, based on only a small number of studies. Using an approach similar to that of Berkman and Syme (1979), various other authors have explored the relationship between social networks and a range of different causes of death within a single population. Eng et al. (2002), for example, followed a cohort of male professionals, in their middle and early-old age, from the USA for a period of 10

years. In a multivariate analysis that adjusted for socio-demographic factors as well as health status and health behaviours, they found that those individuals who were less socially integrated (using the Berkman and Syme Social Network Index) were more likely to die from accidents/suicides and from other causes, but not from cardiovascular diseases or cancer. This contrasts with the findings of Iwasaki et al. (2002) who showed that, in Japanese males of approximately the same age range as the Eng cohort, social participation was associated with deaths from circulatory (including cardiovascular) disease and from other causes, but not from cancer. Among females, the pattern was different again; here, marital status was linked to circulatory disease mortality whereas a lack of contact with close relatives was linked to deaths from cancer and from other causes. This inconsistency in results as yet goes unexplained but possibly reflects a complex inter-relationship between the specific causes of death and the different social network domains.

All the studies described thus far have focused on mortality in general populations and, as a result, provide no information about where on the disease spectrum social networks might exert their influence, whether this be on the development, progression or outcomes of disease (Berkman, 1995). As a first step, a number of studies looked at death rates among groups who were already exhibiting disease. Berkman et al. (1992), for example, followed a group of people who had been hospitalised with a myocardial infarction (MI) and found that those patients who lacked emotional support had an increased mortality risk of 2.9 (95% CI: 1.2-6.9) at six months. The social network data for this study were, moreover, collected prior to the incident myocardial infarction, reducing the likelihood of any confounding between the reported network characteristics and post-MI prognosis. This association has since been confirmed by several other studies which, like those exploring mortality in general populations, involved a range of different patient groups and different social network measures (Berkman and Glass, 2000). Furthermore, in their systematic review, Lett et al. (2005) demonstrated a link between various social network domains and disease progression (additional cardiac events or death) in patients with pre-existing coronary heart disease, with poorer social ties typically conveying an increased risk of between two and four. Social networks have, similarly, been shown to impact on disease progression and outcomes in cancer. A meta-analysis by Pinquart and Duberstein (2010), for instance, combined evidence from 87 different studies, finding that being married was associated with a 12% reduction in the relative risk of mortality, having a large network was associated with a 20% reduction in risk,

and having high levels of perceived social support with a 25% reduction. Nausheen et al. (2009), in contrast, undertook a systematic review of the influence of social networks on disease progression (recurrence, increased stage of disease or death). Here, the results varied according to cancer type, with there being some support for the suggestion that poorer networks are linked to disease progression in breast cancer, but less evidence of an effect for other cancers.

In summary, therefore, there is a strong body of research demonstrating that social networks have an influence on both all-cause and cause-specific mortality rates, although there is still uncertainty regarding which particular causes of death are affected. There is, moreover, evidence that this increase in mortality is explained, at least in part, by disease progression and deaths amongst those who have already developed disease. These findings are well exemplified by a recent meta-analysis in which Holt-Lunstadt et al. (2010) integrated the results from 148 wide-ranging studies which encompassed various different patient groups as well as general populations, and which considered multiple network measures and multiple mortality endpoints (i.e. deaths from any, or a specific, cause). Overall, the risk of mortality was 1.50 (95% CI: 1.42-1.59) times higher amongst those with impoverished social networks, an effect size that the authors point out is equivalent to that of many more established risk factors, such as physical inactivity, obesity and smoking. Interestingly, this study also found that complex social network measures, combining information on several different components of the network, demonstrated even larger effect sizes (OR:1.91; 95% CI: 1.63-2.23), whereas a similar review by Shor and Roelfs (2015) that focused on the frequency of social contact alone identified smaller than anticipated effects (HR:1.13; 95% CI: 1.09-1.17).

The data with respect to the influence of social networks on disease development is, however, neither as extensive nor as conclusive (Heaney and Israel, 2008). Much of the research on morbidity has focused on the incidence of cardiovascular disease, with Orth-Gomer et al. (1993) showing that lower levels of social integration were associated with higher rates of myocardial infarction in a cohort of Swedish men who had no prior history of coronary heart disease, and Barefoot et al. (2005) demonstrating a link between the frequency, and range of, social contact and diagnoses of ischaemic heart disease among Danish adults. Several reviews have, likewise, suggested that social networks are implicated in the development of cardiovascular disease: Everson-Rose and Lewis (2005), for example, concluded that

various social network dimensions (isolation, support and conflict) play a role in cardiovascular morbidity, although their analysis was based on a very small number of studies; Robles and Kiecolt-Glaser (2003), moreover, claimed a similar effect for marital strain but appeared to concentrate on recurrent coronary events rather than on the initial detection of disease. Other authors have, in contrast, described a more mixed pattern of results. Thus, Kawachi et al. (1996) revealed that social isolation among men was associated with the increased incidence of stroke but not of myocardial infarction. Sneed and Cohen (2014), on the other hand, reported a strong relationship between negative social interactions and levels of hypertension but found this effect was restricted to women and younger people. Various other studies have, though, failed to find any evidence of a link to morbidity. An analysis of incidence and death rates for ischaemic heart disease, stroke and hypertension by Vogt et al. (1992), for instance, showed that structural components of the social network were powerful predictors of mortality, in both general and diseased populations, but not of morbidity. Choi et al. (2014), furthermore, found no support for an association between network function and the diagnosis of cardiovascular disease. Research with respect to the incidence of other diseases has been even more patchy, although there is perhaps some evidence for a differential effect across different morbidities, with several studies showing that the quality of social interactions can affect mental health (Okun and Keith, 1998; Lincoln and Chae, 2012), but there being little data to suggest that social networks impact on cancer incidence (Bergelt et al., 2009; Reynolds and Kaplan, 1990; Schmidt et al., 2012).

2.3.2 Understanding mechanisms

In keeping with the complex and multidimensional nature of the social network construct itself, a wide-range of processes have been identified as possibly explaining the link between social relationships and health, leading to the development of a number of conceptual models which seek to bring together these various processes in order to provide a detailed account of the different mechanisms of action, and to shed light on the way in which they together jointly influence health. Perhaps one of the most comprehensive such models was that put forward by Berkman et al. (2000). They posit four main levels of influence which each, in turn, affect the next: the macro-social factors that reflect the wider cultural, economic and political environment; the specific structure of our more immediate social networks; the

functions to which these networks give rise; and the psycho-biological and behavioural processes which manifest at the level of the individual. Thus, in this model, our personal social networks can be seen to act as a mediator between the socio-cultural conditions in which we live and the more proximal, individual-level pathways.

Whilst research exploring the impact of macro-social factors on the form, and hence the quality, of our social networks has largely been neglected within health studies (Berkman et al., 2000), this issue has been of greater interest within sociology more generally. House et al. (1988b) suggest that the structural position of the individual can play a key role in shaping their networks, arguing, for example, that patriarchal societies typically cast women in the role of support provider, whether this be in relation to children, ageing parents or family and friends more widely. They point, moreover, to evidence that social network size and frequency of contact are both associated with levels of education and income. Beyond this, they also highlight the importance of macro-structural changes in society, such as the growing acceptability and prevalence of divorce, or the increasing urbanisation caused by industrialisation, as well as public policy that might, for instance, seek to encourage, and support, women into work.

The structural and functional components of the social network have already been covered in some depth within Section 2.2.2 and do not, therefore, require repetition here. I will, instead, move to consider the three individual-level pathways (psychological, physiological and behavioural) through which Berkman et al. (2000) see social networks shaping health. Beginning with the psychological processes, Cohen (2004) distinguishes between those mechanisms that operate during periods of stress, and those that operate in more everyday circumstances. In the first of these, social networks are thought to help “buffer” against the harmful effects of stress, making available psychological resources that can bolster an individual’s ability to deal with difficult life events, thereby reducing their risk of developing mental health problems. Here, Berkman et al. (2000) highlight a wide body of evidence demonstrating that self-efficacy, self-esteem and coping styles each mediate the link between social networks and health, with Cohen (2004) suggesting that networks can foster the belief that support will be available if necessary, making challenging circumstances feel more manageable and, thus, promoting a sense of personal control. The “main effects” pathway, in contrast, suggests that social networks benefit health

by imbuing life with a sense of meaning and purpose, a hypothesis that Cohen (2004) argues is backed by a range of studies showing that social integration is associated with psychological well-being, irrespective of the existence of stress (Cohen and Wills, 1985). In their review, moreover, Berkman et al. (2000) similarly attest that social networks can contribute to feelings of security, belonging and purpose, all of which have been associated with positive mood and good mental health.

In a somewhat different vein, there is also a large, and growing, research literature demonstrating that physiological processes might likewise go some way to explaining the relationship between social support and health. A detailed narrative review by Uchino (2006) revealed that social support is related to everyday ambulatory blood pressure, to cardiovascular reactivity in stressful situations, and to the development of atherosclerosis. Uchino, furthermore, found strong evidence that social support impacts on immune function, especially among the elderly, with more recent studies additionally showing associations with natural killer cell activity in cancer patients, and with helper T-cell counts in those who are HIV-positive. Whilst generally less well studied, data are similarly emerging of a link between social support and neuroendocrine function, with concomitant effects on cardiovascular health and immune function, via the production of the hormones catecholamine and cortisol respectively (Uchino, 2006). From this brief review alone, it is possible to see that these different physiological pathways are likely to be both complex and overlapping.

This then brings us to the final of Berkman et al. (2000)'s three proposed individual-level pathways, namely that relating to health behaviours. Here, Heaney and Israel (2008) differentiate between three very different types of health behaviours: those that aim to keep us healthy (e.g. physical exercise), those that present some risk to our health (e.g. smoking), and those that characterise our responses when we become ill (e.g. adherence to medication). Berkman et al. (2000), moreover, argue that existing empirical research supports the notion that health behaviours do, to some extent at least, play a mediating role in explaining the link between social networks and health; they point out, however, that current data might underestimate the significance of health behaviours because of an over-reliance on a small number of social network measures, such as network size and social support. Indeed, several authors have since identified a range of other possible mechanisms through which social networks might help to shape health behaviours, with Uchino (2006), for example, suggesting that networks might act both directly through, say, the

opportunity to share information, and more indirectly through the life-affirming benefits of social network membership. Cohen (2004), furthermore, stresses the importance of social influence, as well as highlighting the way in which a sense of responsibility towards others can act as source of motivation to maintain health. More recently still, Umberson et al. (2010) have undertaken a detailed review of the available evidence, bringing it together to develop a conceptual framework that seeks to explicate the specific pathways connecting social networks to health behaviour (Figure 2.2).

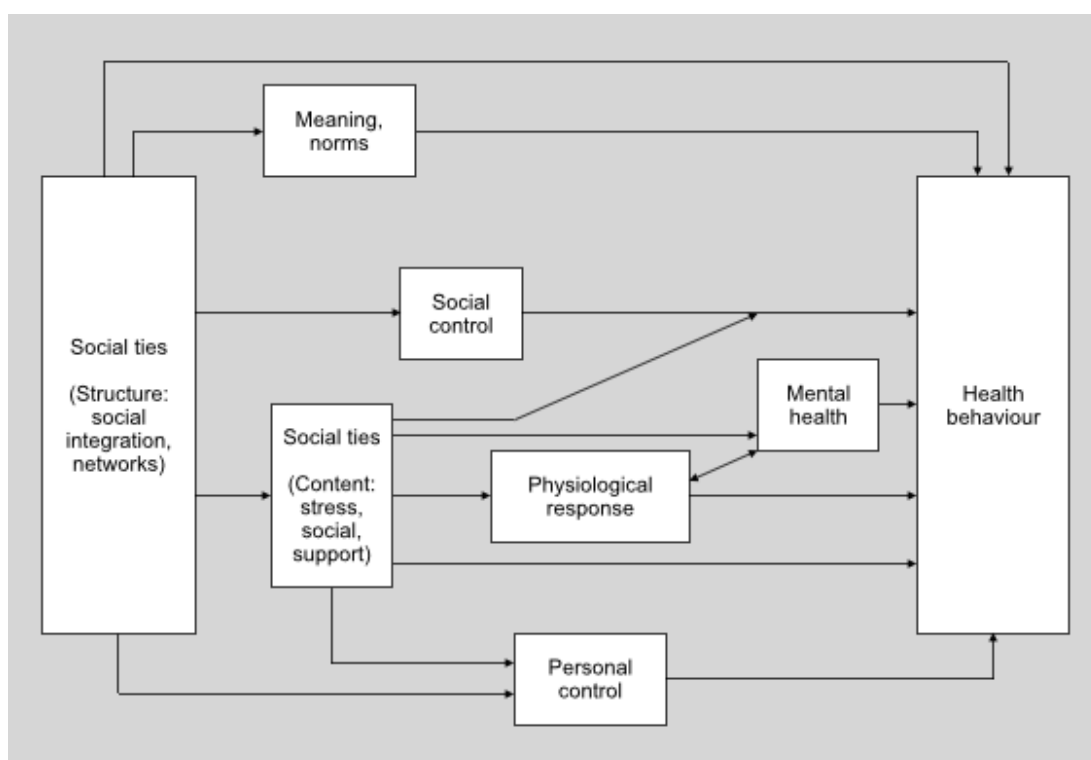


Figure 2.2: Conceptual model for mechanisms linking social networks to health behaviour (Umberson et al., 2010)

Although much of this model corresponds to the pathways already identified in relation to health more generally, three specific aspects are worthy of particular note. First, Umberson and colleagues explicitly root their conceptual framework within the life course perspective and, as a result, they see the network, the individual and their health behaviours as constantly evolving in relation to each other, as the individual moves through life. Thus, the various network and individual-level factors are not viewed as operating in isolation, but are rather considered to “*work individually, collectively, and interactively to link social ties to health habits*” (p. 149). For

Umberson et al. (2010), therefore, the ideas of complexity and interactivity are at the heart of the relationship between social networks and health behaviours. This becomes especially evident in their treatment of the issue of stress. Whilst there is widespread recognition (Cohen, 2004) that social networks may help to mitigate the effects of stress on health, Umberson et al. (2010) go further in identifying a complex set of interactions that connect stress, social relationships and health: (1) stress can lead to poor health behaviours; (2) stress can harm social relationships that are normally seen as supportive; (3) poor health behaviours, such as heavy drinking, can likewise damage social relationships; and (4) poor social relationships can cause stress which can, in turn, lead to poor health behaviours. Umberson et al. (2010) also pay particular attention to the importance of symbolic meaning. Here though, they move beyond the life affirming attributes of the network described by Berkman et al. (2000) and Cohen (2004), instead emphasising the different ways in which health behaviours and social meanings can become intertwined. It is well known, for example, that the meanings attached to different types of food and drink can vary enormously across cultures, with identical items being forbidden amongst some groups but highly valued in others. Similarly, within our personal networks, social norms can emerge which encourage the individual to adopt the same behaviours as those around them. Meanings can, furthermore, become attached to (elements of) the social network, leading the individual to emulate the behaviours of those network members whom they hold in high regard, but to eschew the behaviours that are associated with less prestigious sections of the network. Finally, meanings can also become attached to social situations, with the result that certain health behaviours (e.g. excessive eating and drinking) can become inextricably linked with certain occasions (e.g. family celebrations). Overall, therefore, Umberson et al.'s (2010) framework can be seen to build on Berkman et al.'s (2000) more general model of social networks and health, whilst at the same time advancing our understanding of the specific network concepts and pathways that relate to health behaviour. This raises the question, moreover, of how a particular focus on the process of health behaviour change could help to further develop conceptual thinking around the role of social networks in lifestyle change.

2.4 Summary

This introductory chapter has sought to provide a brief overview of the field of *social network studies in health*, outlining the major theoretical, methodological and empirical challenges that researchers face in attempting to develop a comprehensive account of the role that social networks play in shaping our health. I began by considering the particular difficulties encountered in defining the term social network, showing that a lack of consensus regarding its conceptualisation and operationalisation are further exacerbated by ever-changing social and cultural trends. These differences appear to stem, at least in part, from the multidisciplinary nature of the field. Thus, the social network has been conceptualised in generic terms (all aspects of our social relationships), in structural terms (a group of people and the ties that bind them), and in methodological terms (formal mathematical approaches to social network analysis). There has, similarly, been widespread variation in the chosen objects of study, with diverse approaches being taken to the definition of network boundaries (behaviour or relationship type), to the level of analysis (the individual or the network), and to the importance of wider relationships in understanding individual actions. This has all taken place, moreover, within the context of substantial underlying changes in family structures, patterns of work, and technological advances. A picture has emerged, therefore, of the social network as a complex, multidimensional construct, beneath which lie further conceptual layers. At the meso-level, two main sub-components of the social network have been identified, namely structure (the way in which the network is organised), and function (the behaviour of the network). Below this fall yet more micro-level concepts, such as (supra)dyadic ties or social support, each of which is associated with its own set of methods and measures, variously taking in, for example, formal social network analysis, psychometric scales and qualitative approaches. Bearing this complexity in mind, I have opted to use Smith and Christakis's 2008 definition which sees the social network as "*the web of social relations around an individual*" (p. 407), whilst at the same time being mindful of the wide-ranging elements that make up our social worlds.

In the second half of the chapter, I moved away from a focus on the nature of social networks in general, shifting instead to explore the relationship between networks and health, beginning by examining the evidence for a causal link. Here, the first suggestions came from Cobb (1976) and Cassel (1976), whose reviews revealed a

highly consistent pattern of results across numerous, wide-ranging cross-sectional and retrospective studies, leading to Berkman and Syme's (1979) seminal work in which levels of social integration were shown to be prospectively associated with subsequent all-cause mortality. An exponential increase in research over the last thirty years, encompassing many different population groups, network measures and health outcomes, has since led to the emergence of a vast and complex literature, from which a number of key messages can be discerned. First, there is a strong body of evidence demonstrating the causal influence of social networks on all-cause and cause-specific mortality. Variability in the results relating to particular causes of death does, though, suggest that different social network domains may impact different health domains. These network effects on mortality are, moreover, partially explained by disease progression and deaths amongst those who have already been diagnosed with a health condition. Evidence with respect to disease development is, however, both less extensive and less convincing. Most research has been undertaken in relation to the incidence of cardiovascular disease but has produced somewhat mixed findings; in other areas, there is little evidence to support an association between social networks and disease incidence, once main risk factors, such as health behaviours, have been taken into account.

Alongside these attempts to establish a causal link, attention has also been paid to elucidating the main underlying mechanisms. Indeed, many different such mechanisms have been proposed, as a result of which Berkman et al. (2000) have put forward a comprehensive conceptual framework that seeks to bring together each of these separate strands. This model identifies four main layers of influence, with the wider macro-social conditions helping to shape the structure of our immediate social networks, in turn giving rise to the functional qualities of the network, which are ultimately manifest at the level of the individual in a host of different psycho-biological and behavioural processes. Other authors have, in contrast, taken a more focused approach, instead seeking to develop a detailed understanding of one specific meso-level pathway. Thus, Umberson et al. (2010) have drawn attention to a number of ways in which Berkman et al.'s (2000) broader framework can be extended to better reflect the role of social networks in health behaviour, including a recognition that the network, the individual and their health behaviours continually evolve in relation to each other, and a widening of the definition of symbolic meaning to encompass not just the life-affirming qualities of the network, but also the social meanings that can become attached to specific health behaviours. In a similar vein, it

therefore seems likely that a specific focus on the process of health behaviour change might help to further advance our conceptual understanding of the relationship between social networks and lifestyle change.

CHAPTER 3

Social networks & quitting

3.1 Introduction

In the previous chapter, we saw that much work has already been done on defining, and developing measures of, the main components of social networks. We also saw that there is substantial evidence demonstrating a link between social networks and a variety of health outcomes, with attempts increasingly being made to shed light on the mechanisms that underpin this relationship. I now turn my attention to one specific aspect of health, namely smoking cessation, looking in more detail at the body of research that examines the role of social networks in quitting smoking. I shall approach this, once again, in the form of a narrative review, although here I also incorporate a systematic search of the literature to enable a more detailed and thorough examination of the existing evidence base. This chapter is divided, moreover, into two parts, the first of which *The method* (Section 3.2) seeks to lay out my aims in undertaking such a review, to explain the process by which I identified and selected relevant research articles, and to outline my analytical approach. In the second half of the chapter, I shall then go on to discuss the main findings of the review, beginning in *Establishing a link* (Section 3.3.1) by considering the extent to which the evidence supports the idea that social networks and smoking cessation are interconnected, exploring separately the importance of structural and functional network features. I shall conclude the chapter in *Understanding mechanisms*

(Section 3.3.2), with a focus on that part of the literature that attempts to elucidate the possible mechanisms through which social networks and smoking cessation might be linked. In this regard, authors have variously sought both to refine our understanding of specific social network concepts and to investigate wide-ranging forms of interaction, including those between different social network components, those between the social network and the individual, and those between individual members of the network.

3.2 The method

My guiding principle for this review is a belief that social networks are complex, multidimensional constructs which are comprised of many different inter-locking components i.e. *“the web of social relations around an individual”* (Smith and Christakis, 2008, p. 407). As such, I argue that it is important to retain a sense of the social network as a whole, and to avoid a reductionist tendency to concentrate on individual elements of the network in isolation. With this in mind, I decided to take a relatively broad-brush approach to the review, aiming to develop a general feel for the breadth of research in this area, rather than attempting to produce a more exhaustive account of the literature in relation to any one network component. My specific objectives here were: (1) to build a picture of the range and quality of research exploring the relationship between natural social networks and smoking cessation in adults; (2) to develop an understanding of the key emergent themes within this literature; and (3) to identify any significant gaps in the research literature as it stands to date. In order to achieve these objectives, therefore, I combined a systematic search of the literature with a narrative review to allow for an in-depth yet, at the same time, flexible and more nuanced exploration of the field.

Following a similar search strategy to that adopted by Holt-Lunstadt et al. (2010) in their meta-analysis of social network influence on mortality, I used two sets of inclusion criteria, one covering smoking cessation and the other social networks, with each containing multiple search terms to ensure that as wide a variety of articles as possible was captured. Thus, in relation to smoking cessation, the first block of search terms contained six different items (quit*, stop*-smok*, smok*-abstinen*,

smok*-cessation, tobacco-cessation and tobacco-use-cessation)¹, whereas the second network-related block of terms contained in excess of 30 items (see Table 3.1), reflecting the particular diversity of elements making up the network. Empirical research papers that satisfied both sets of inclusion criteria were identified by searching six bibliographic databases (Medline, Social Science Citation Index, Science Citation Index, PsychInfo, Embase, and BIOSIS Citation Index), most recently on 19 April 2015. Whilst no time restrictions were applied, the search was limited to articles written in the English language. Moreover, due to the commonality of references to smoking and social context factors in the abstracts of much of the published literature (an abstract search of Medline alone produced in excess of 13,000 articles), it proved necessary to restrict the search to the titles only. As a result, I also examined the bibliographies of the selected papers to identify any commonly cited additional references. Whilst it is likely that such an approach will overlook some relevant papers, it does have the advantage of providing a feasible search strategy which reflects the multidimensional nature of the social network.

Table 3.1: Set of search terms for social networks

Search terms	
?-network*	spous*
?-support*	couple*
?-context*	partner*
?-environment*	marri*
?-influence*	marital
?-integration*	husband*
?-participation*	wif*
?-cohesion*	wiv*
?-relation*	famil*
?-capital*	friend*
?-isolation*	peer*
support-network*	colleague*
WHERE ?= social OR influence	

¹* indicates that the search term can be followed by any number of characters whereas ? (see Table 3.1) indicates a specific set of possibilities.

From these searches, I found a total of 227 research articles, and subsequently screened the abstracts to identify those papers which were of relevance to my review. I rejected 22 articles because they were completely unrelated to smoking cessation, and another 25 because they focused solely on aspects of the pre-quit process, such as motivations and intentions to quit, or quit-related social support delivered in advance of any attempt to stop smoking (see Figure 3.1 for a flow chart of the search process). Of the remaining 180 papers, two-thirds (118) looked at the role of social networks in smoking cessation, although 11 of these dealt with quitting in adolescence rather than adulthood. I then discarded a further 14 papers where the emphasis was on online social networks like Facebook, and 37 which aimed to evaluate smoking cessation interventions. This left me, therefore, with 56 articles that sought to explore the nature of the relationship between real-world social networks and quitting in adult populations. A review of the bibliographies of these 56 papers led to the identification of a further nine relevant references, giving a total of 65 articles (see Appendix A for a summary), of which 47 sought to demonstrate an association between networks and cessation, and 30 aimed to explore the underlying mechanisms (12 papers attempted to address both issues). The first of these 65 papers was published in 1982, shortly after the seminal work by Berkman and Syme (1979) which examined the relationship between networks and mortality. There has since been a steady increase in the number of cessation-related articles, with a third of all the papers being published in the last five years (Figure 3.2).

In terms of the analysis, I adopted a qualitative thematic approach, looking across the papers both to find patterns of consensus and disagreement, as well as to identify those areas which have been less thoroughly investigated. Separate analyses were done for those papers that focused on establishing a link between networks and cessation, and for those that examined the processes by which the two are inter-related. I chose to structure this analysis, furthermore, around the conceptual frameworks provided by the social network studies in health perspective that was outlined in Chapter 2. This is, perhaps, somewhat at odds with most studies of health behaviour and health behaviour change which are commonly rooted in psychology and, as a result, put an emphasis on the individual and the internal processes that lead to a particular behaviour. A variety of different psychological models have been proposed in this regard, including the Theory of Planned Behaviour (Ajzen, 1985), the Trans-theoretical or Stages of Change Model (Prochaska et al., 1992) and, more recently, the PRIME Theory of Motivation (West, 2009). This latter model, moreover,

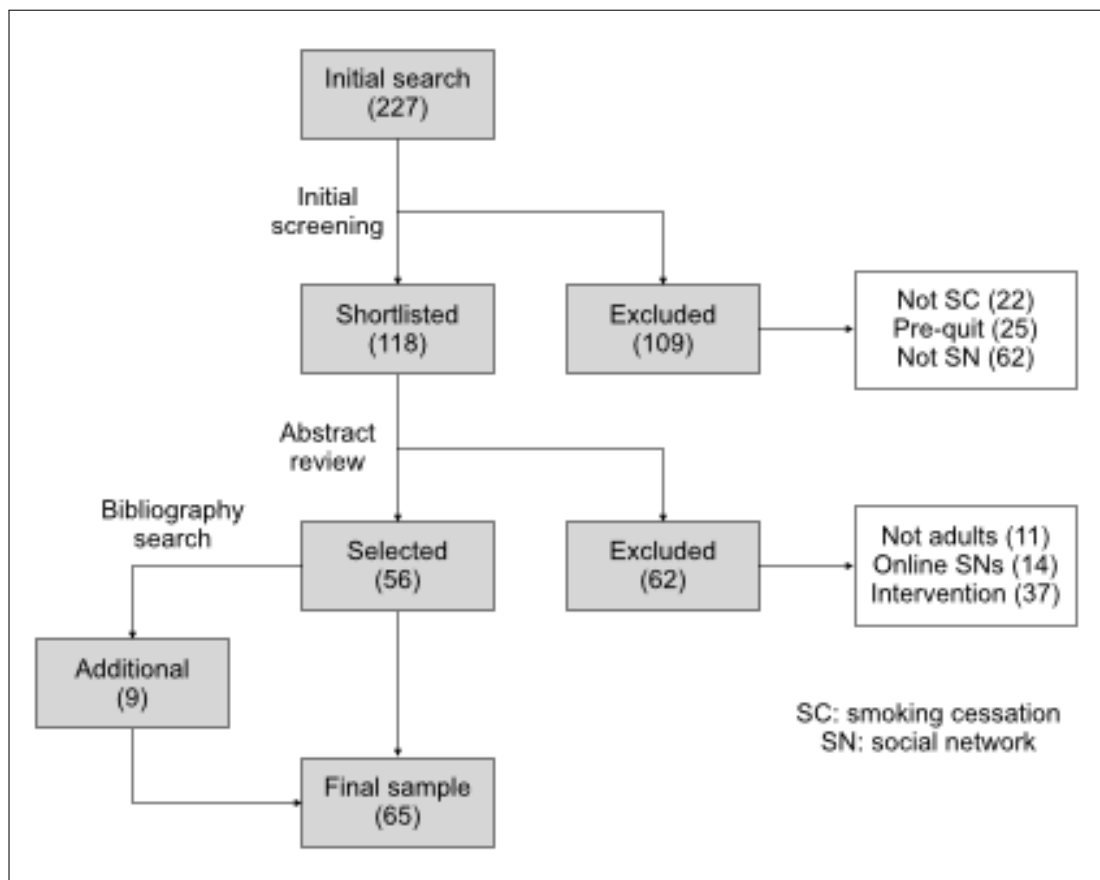


Figure 3.1: Flow chart of systematic search

explicitly takes account of the addictive nature of certain behaviours such as smoking. Whilst these psychological theories generally acknowledge the importance of social influences, the mechanisms by which the social world is seen to exert an effect are typically underspecified. In the Theory of Planned Behaviour, for instance, social influence is reduced to the *subjective norm*, which is defined as comprising the beliefs that an individual holds regarding the social norms of behaviour, together with their perceptions of the social pressure to conform to these norms. For West (2015), however, this lack of specificity represents a conscious decision to develop a psychological model that can be combined with theories from different disciplines to build a more comprehensive understanding. A social network studies approach provides one such avenue through which psychological levels of explanation of health behaviour can be augmented.

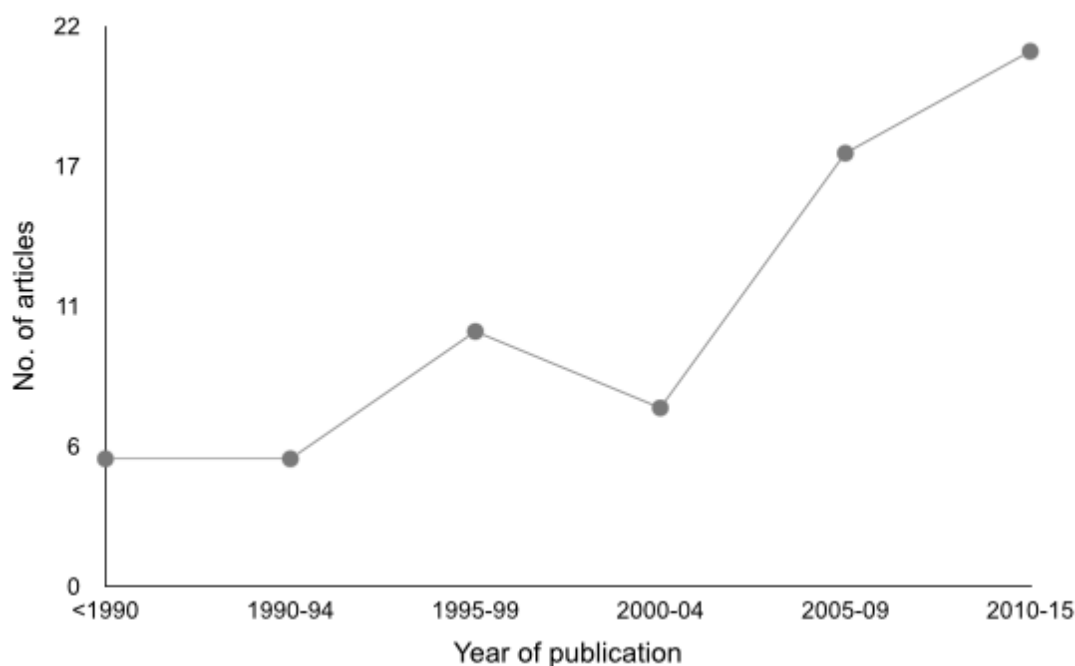


Figure 3.2: Articles exploring link between social networks and cessation

3.3 The findings

3.3.1 Establishing a link

Turning first to the articles (47) that sought to establish a link between social networks and smoking cessation, two broad methodological approaches were taken here: studies that focused on smokers who were actively trying to quit, either by themselves or by taking part in a smoking cessation intervention (often within the context of a randomised clinical trial); and population-based studies that looked more generally at changes in the smoking status of all smokers, regardless of whether or not they were attempting to quit. Many of these latter papers made use of data from national surveys (e.g. the General Household Survey of Great Britain (Jarvis, 1996) and the Family Survey Dutch Population 2000 (Monden et al., 2003)) or cohort studies (e.g. the National Longitudinal Survey of Youth in the USA (Weden and Kimbro, 2007) and the International Tobacco Control (ITC) Four Country Survey (Hitchman et al., 2014b)); whilst these sources had the advantage of very large sample sizes, often involving many thousands of smokers, they typically gave access to only

minimal social network data. In contrast, most studies of active quitters included much more detailed and comprehensive network information but only in relation to relatively small samples of less than 500 smokers. These differences in approach appeared to have consequences for the components of the social network that were studied. In nearly all cases, the population-based studies limited their focus to structural features of the network (i.e. the constituent elements of the network and how they are organised), whereas quitter-based studies almost always included an analysis of network function (i.e. the social behaviours and resources that flow from the network), frequently in conjunction with an analysis of network structure. The vast majority of studies did, though, whether they be quitter or population-based, involve the analysis of data that had not been specifically collected for the purposes of investigating the link between social networks and smoking cessation. As a result, much of the research had to rely on available network-related data items rather than being guided in their choice of measure by theoretical concerns. Moreover, targeting of specific population groups was commonplace across both study types, with approximately two-thirds of the articles indicating that eligibility was variously determined on the basis of, for instance, marital status (13 papers), gender and age (11), health status (4), pregnancy (3), and ethnicity (2).

Structural features

Beginning with those studies that looked at the structural components of social networks, it is important to point out that, with just a few exceptions, such analyses depended on relatively simple measures of structure that could be captured directly either using a single data item or using the same data item collected over several time points. Furthermore, these measures fell into two main categories, those identifying particular people within the smoker's network, and those describing the smoking and quitting characteristics of network members. Of the 13 studies looking at network membership, all but three focused on marital status. Here, there was a general consensus that being married was linked to increased rates of quitting (Brothers and Borrelli, 2011; Greenwood et al., 1995; Hanson et al., 1990; Hill Rice et al., 1996; Chandola et al., 2004); in contrast, those smokers who had never cohabited, those who had spent long periods living alone and those who had experienced multiple relationship breakdowns were less likely to have given up smoking (Kriegbaum et al., 2011).

Within this overall pattern of association, there was nevertheless some variation, with Sun et al. (2009), for example, reporting higher levels of continued abstinence among married people at three months post-quitting, but not at two months. In relation to gender, Murray et al. (1995) showed that, whilst the effect of marital status was evident for both men and women in the short-term, it was limited to females in the longer-term. Broman et al. (2004), on the other hand, failed to find an association between baseline marital status and subsequent ten-year quit rates, yet, in a cross-sectional analysis, demonstrated that males who had either got married or remained married over the course of the study were more likely to have become ex-smokers. Similar differences were also reported with respect to ethnicity; Weden and Kimbro (2007), for instance, showed that getting married at any age was beneficial for quitting in black and hispanic Americans, but that early marriage had a negative impact on cessation in white Americans. Beyond these studies of marital status, others have shown higher rates of cessation among those who have dependent children (Jarvis, 1996) and those who have more frequent contact with close social network members (Ross et al., 2013), but lower rates in those who live with their parents (Menden et al., 2003) and in those who have regular interaction with more distal network members (Ross et al., 2013).

Structural analyses focusing on smoking and quitting among social network members were particularly common, with over half (28) of the identified articles exploring some aspect of smoking exposure. The most frequent of such analyses concentrated on partner smoking status, although here the findings were less clear cut than those in relation to marital status, where the majority of papers reported an association with quit outcomes. Of the 20 studies looking at partner smoking status, 13 found evidence of an association, four did not, and the remaining three presented mixed results. Furthermore, on closer examination, it became apparent that the pattern of results varied considerably according to the study design employed. All six cross-sectional (concurrent) analyses suggested a link between partner smoking status and quit outcomes (Franks et al., 2002; Hanson et al., 1990; Kashigar et al., 2013; McBride et al., 1998; Menden et al., 2003; Murray et al., 1995), with participants who were married to current smokers being less likely to successfully give up; in one such analysis (Murray et al., 1995), however, this effect was limited to males only. In contrast, while seven longitudinal (prospective) analyses demonstrated an association (Coppotelli and Orleans, 1985; Danaher et al., 2009; Homish and Leonard, 2005; Manchon Walsh et al., 2007; Murray et al., 1995; Osler and Prescott, 1998;

Okechukwu et al., 2010), a further seven found no evidence of an effect (Cohen and Lichtenstein, 1990; Ginsberg et al., 1991; May et al., 2007; McBride et al., 1998; Murray et al., 1995; Okechukwu et al., 2010; Ota et al., 2012). In terms of causality, therefore, it is not entirely clear whether the direction of influence is from the quitter to the social network or the reverse. Thus, having a non-smoking partner does not necessarily improve your chances of stopping smoking, but making a quit attempt might make your partner more likely to give up as well. Indeed, the analysis of the Health & Retirement cohort study undertaken by Franks et al. (2002), and subsequently extended by Falba and Sindelar (2008), provides a degree of support for this explanation since it found that change in partner smoking status was key. Over the course of two (Franks et al., 2002) and four (Falba and Sindelar, 2008) years, smokers were more likely to report having given up if their partners had also quit during this period. Christakis and Fowler (2008), likewise, reported a 67% increase in the chances of smoking cessation among individuals whose partners had quit. Two further cohort studies, moreover, examined the smoking behaviour of married couples at multiple time points, allowing detailed smoking and quitting histories of both husband and wife to be compiled (Cobb et al., 2014; Dollar et al., 2009). Although these studies found that being married to a current smoker decreased the odds of quitting, neither appeared to simultaneously explore concurrent and longitudinal associations, making it difficult to consider more closely the direction of influence.²

In addition to these analyses focusing on partner smoking status, several authors took a more encompassing approach, also looking at patterns of smoking in the wider social network, with a particular emphasis on two main aspects of network smoking: exposure to smoking at home and smoking among friends. Overall, there was generally a lack of consensus regarding whether these broader network components had an impact on quit outcomes. Thus, in relation to smoking within the home, Mermelstein et al. (1986) reported no difference in abstinence rates either at the end of treatment or at three months post-intervention, but they did find evidence of an effect at 12 months, leading them to conclude that household smoking exposure may have a greater role in long-term maintenance than in shaping the initial success of a quit attempt. In their analysis of the British Household Panel Survey, moreover, Chandola et al. (2004), similarly found lower one-year quit rates among individuals

²The total number of analyses adds to more than 20 as some studies looked at several social network components or at multiple time points.

who described more than half the people in their household as being smokers. A study by Murray et al. (1995), on the other hand, showed that individuals with early-stage chronic obstructive pulmonary disease were less likely to be non-smokers at four months if they lived with a (presumably adult) child who smoked; by the 12 month follow-up this difference was seen only in males. Neither May et al. (2007) nor Hill Rice et al. (1996), however, demonstrated any support for an association between smoking in the home and quit outcomes in participants followed for six and 12 months respectively.

A correspondingly mixed picture also emerged in relation to smoking among friends. While several authors reported a reduction in quit rates with an increasing prevalence of smoking amongst friends (Hitchman et al., 2014b; Kashigar et al., 2013; Mermelstein et al., 1986), several others found no differences (Bock et al., 2013; May et al., 2007; Mermelstein et al., 1986). Interestingly, Hitchman et al. (2014b), in a similar fashion to Franks et al. (2002), also looked at changes in friend smoking between two consecutive waves of the ITC Four Country Survey, showing that those participants who experienced a decrease in their number of smoking friends were more likely to have stopped smoking; in contrast, those participants who acquired more smoking friends were less likely to have quit.

More broadly, there was a miscellany of other analyses exploring different elements of social network smoking, again giving rise to somewhat variable results. May et al. (2007), for example, demonstrated that having colleagues who smoked adversely impacted on quitting in the short (one month) but not the medium-term (six months), whereas Mermelstein et al. (1986) reported the reverse, with lower cessation rates at 12 months but not at three. Smoking cessation amongst networks members was, likewise, shown to be important by Christakis and Fowler (2008), who found that the chances of quitting increased if a sibling or colleague, but not a neighbour, gave up smoking. Rather than specifying particular relationship categories, various other authors looked at levels of smoking in the social network (beyond the household) more generally: only one of these studies (Ockene et al., 1982), however, found any evidence of an association between the prevalence of network smoking and quit outcomes; three further studies described no such effect (Glasgow et al., 1985; Osler and Prescott, 1998; Hill Rice et al., 1996).

Finally, it is worth returning to the point made at the beginning of this section that, within the literature on social network structure and cessation, there was typically a

widespread reliance on simple measures. Out of the 35 studies looking at some aspect of structure, only four used complex measures that were constructed from more than one data item. Two of these four studies explored general features of the social network, with Greenwood et al. (1995) and Hanson et al. (1990) both using measures of social isolation/participation that drew on information about the frequency of contact with different relationship categories (e.g. friends or colleagues) and on information about membership of social, religious and other formal groups. The remaining two studies, in contrast, explored more specific smoking-related components of structure. Here, Kashigar et al. (2013) focused on the extent of exposure to secondhand smoke by combining data on spousal, household and friend smoking, whereas Bock et al. (2013) compiled social norms indices that encompassed both structural and functional network elements, namely levels of smoking, levels of quitting, and the anticipated reaction of network members to the participant's own quit attempt. Across these studies, however, evidence of an association with cessation outcomes was found in just two, namely those by Hanson et al. (1990) and Kashigar et al. (2013). One further study, that by Christakis and Fowler (2008), used formal social network analysis techniques to examine more sophisticated measures of network structure, such as centrality and clustering, but these analyses were limited to the exploration of overall network, rather than individual, behaviour.

Taken together, therefore, these findings provide some support for the idea that structural network features and smoking cessation outcomes are interlinked. The clearest evidence emerges in relation to marital status, where a wide range of studies, including both cross-sectional and longitudinal designs, have found that levels of quitting are generally higher among married smokers. In contrast, a more mixed pattern of results was seen regarding the association between partner smoking status and quit rates. Whilst all six cross-sectional studies here demonstrated a link, only half of the longitudinal analyses did so, possibly suggesting that the flow of influence is in the opposite direction to that which might be imagined; rather than playing a role in shaping cessation outcomes, partner smoking status may instead be changing in response to, or as part of, a (joint) quit attempt. Research that simultaneously explores both concurrent and longitudinal associations could, perhaps, help to shed more light on the direction of causality. Although other aspects of network smoking have also been examined, the data are insufficient to enable any firm conclusions to be drawn: the many different ways in which network smoking can be operationalised, the relatively small number of studies looking at any one issue, and the general tendency

towards multiple significance testing all present challenges in establishing a consensus. Furthermore, there is scant evidence that more complex methods of assessing network structure have yet been widely adopted in relation to smoking cessation.

Functional features

This now brings us to those studies that explored the functional, or behavioural, features of the social network which, as we saw in Section 2.2.2, encompass a wide range of positive and negative behaviours, including social support, social influence and negative social interactions. Unlike the analyses of structure, the use of complex measures predominated here; out of the 28 articles examining some aspect of network function, only six relied solely on simple, single question approaches. This reflects, perhaps, the general recognition that concepts such as social support are abstract in nature and cannot be measured directly but are, instead, better captured by measures drawing on multiple data items. Studies of social network function did, nevertheless, mirror the structural approaches in that they drew a distinction between general and smoking-specific forms of behaviour.

Across the ten studies looking at network function more generally, the emphasis was almost exclusively on social support. The most commonly used measure in this regard was the Interpersonal Support Evaluation List (ISEL) (Cohen et al., 1985), a thoroughly evaluated data collection instrument that covers four main dimensions of social support: appraisal (availability of a confidant), tangible (access to material aid), self-esteem (source of positive evaluation) and belonging (availability of a companion). Thus, there are areas of both similarity and difference between this classification system and that adopted by House (1981) who distinguished between emotional (expressions of love, understanding & trust), instrumental (sharing of tangible resources), appraisal (giving of evaluative feedback) and informational (sharing of knowledge & advice) forms of support. In particular, the ISEL dimensions of appraisal, tangible and self-esteem support appear to correspond to House's dimensions of emotional, instrumental and appraisal support, respectively. From this point on, therefore, in order to avoid confusion, I shall use the terminology of House (1981). In addition to the ISEL, several other simpler measures of social support were also employed and, whilst it was not as immediately apparent that they had all been as extensively tested, they did seek to cover largely similar areas of support.

In terms of the findings, one cross-sectional and four longitudinal studies failed to demonstrate a relationship between general social support and smoking cessation (Brothers and Borrelli, 2011; Glasgow et al., 1985; Kashigar et al., 2013; Nollen et al., 2005; Pollak and Mullen, 1997). In contrast, four cross-sectional analyses did find evidence of an association. Nollen et al. (2005), for example, reported higher rates of quitting among those who received higher levels of support; Ross et al. (2013), on the other hand, found that support from a close counterpart was linked to improved cessation but that support from a more distant network member was associated with a reduction in quitting. Two other authors examined specific types of social support, with Hanson et al. (1990) showing a positive effect for emotional but not for instrumental and informational support nor for social anchorage (belonging), while Luscher et al. (2015) demonstrated a negative association with emotional and instrumental support. Once again, the cross-sectional nature of these analyses means that no judgement can be made as to the underlying direction of influence. Two longitudinal studies did, though, reinforce the idea that social support plays a causal role in shaping quit outcomes. Mermelstein et al. (1986) found that pre-quit ISEL scores predicted quit rates both at the end of treatment and at the three-month follow-up; whilst this study failed to show an effect at 12 months, however, Chandola et al. (2004) demonstrated that higher levels of social support (assessed using a simpler five-point scale) were associated with increased abstinence across two consecutive waves of the annual British Household Panel Survey. Interestingly, within Mermelstein's study, emotional support was also shown to make the strongest and most consistent contribution towards the overall effect of social support, perhaps lending some weight to the findings of Hanson et al. (1990).³

Despite the fact that network function covers a much broader range of constructs than social support alone (Section 2.2.2), very few papers attempted to consider any of these wider concepts. One cross-sectional study by Ross et al. (2013) did, though, explore the influence of negative social interactions, finding that excessive demands from close network members, but not from more distal counterparts, were associated with worse quit outcomes across gender and age. There was, however, no consistent evidence of such an effect with respect to relationship worries and conflict; a sense of being needed was, likewise, not linked to smoking cessation.

³The total number of analyses adds to more than ten as one study looked at several social network components.

Beyond these analyses of more generalised forms of network function, a further 20 studies examined the importance of quit-related network support. Once again, the majority of these studies drew on one particular measure of support, namely the Partner Interaction Questionnaire or PIQ, which was first developed by Mermelstein et al. (1983). In its original long form, the PIQ contained 76 items, including a mixture of positive and negative behaviours covering both general and quit-related support. Participants were asked to indicate how frequently their partner had performed each behaviour in the past week (four-point scale) and to assess how helpful they had found these actions (three-point scale); the two scores were then multiplied and averaged to create an overall rating of subjective helpfulness. Several years later, Cohen and Lichtenstein (1990) modified and simplified the PIQ: (1) reducing the instrument to 20 quit-related items, including 10 questions relating to positive forms of social support and 10 relating to more negative interactions (see Table 3.2); (2) omitting the helpfulness rating to provide a more objective measure of partner support; and (3) loosening the focus on romantic partners by allowing quitters to nominate an individual from their network who was expected to take a strong interest in the quit attempt. Cohen and Lichtenstein (1990) also produced two versions of the PIQ-20, one to capture quitters' prior expectations of the support they would receive, and one to capture the actual support received. The PIQ-20 has since become the most predominate form of the questionnaire, although a number of other versions, both longer and shorter, have also been employed.

Among the 12 studies that made use of the PIQ, approximately half of all the findings supported the notion of a link between partner support for quitting and cessation outcomes. As with general social support, cross-sectional analyses were more likely than longitudinal analyses to show an association, although here the difference was less marked. Of those studies that looked concurrently at the relationship between partner support and quit status, seven reported an effect (Brothers and Borrelli, 2011; Cohen and Lichtenstein, 1990; Hill Rice et al., 1996; Lawhon et al., 2009; Loke et al., 2012; Mermelstein et al., 1986; Roski et al., 1996) and three did not (Glasgow et al., 1985; Hill Rice et al., 1996; Lawhon et al., 2009). In comparison, while seven prospective studies found that the PIQ predicted subsequent quitting (Cohen and Lichtenstein, 1990; Danaher et al., 2009; Hill Rice et al., 1996; Lawhon et al., 2009; Lichtenstein et al., 2002; Mermelstein et al., 1983; Roski et al., 1996), nine studies failed to demonstrate such a link (Brothers and Borrelli, 2011; Cohen and Lichtenstein, 1990; Danaher et al., 2009; Hill Rice et al., 1996; Lawhon et al., 2009;

Table 3.2: Partner Interaction Questionnaire (20 item version)

Instrument Subscales and Items	
Negative Behaviours	
1.	Asked you to quit smoking
2.	Comment that smoking is a dirty habit
3.	Talk you out of smoking a cigarette
4.	Comment on your lack of will power
5.	Comment that the house smells of smoke
6.	Refuse to let you smoke in the house
7.	Mentioned being bothered by smoke
8.	Criticise your smoking
9.	Express doubt about your ability to quit/stay quit
10.	Refuse to clean up your cigarette butts
Positive Behaviours	
1.	Compliment you on not smoking
2.	Congratulate you for your decision to quit smoking
3.	Help you think of substitutes for smoking
4.	Celebrate your quitting with you
5.	Help to calm you down when you are feeling stressed or irritable
6.	Tell you to stick with it
7.	Express confidence in your ability to quit/remain quit
8.	Help you to use substitutes for cigarettes
9.	Express pleasure at your efforts to quit
10.	Participate in an activity with you that keeps you from smoking (e.g. going for a walk instead of smoking)
Positive and negative behaviours were mixed together in random order when presented to participants	
Source: Cohen and Lichtenstein (1990)	

Lichtenstein et al., 2002; Mermelstein et al., 1986; Pollak and Mullen, 1997; Roski et al., 1996). We can see from these figures, moreover, that many studies incorporated more than one analysis, with results typically being presented across a range of different time points, and separately for the positive and negative scales. Although no clear pattern emerged of how the relationship between quit support and cessation varied over time, a more stable picture was apparent with regards to the type of support; in cases where an effect was found, higher PIQ-positive scores were associated with better quit rates whereas higher PIQ-negative scores were linked to worse outcomes. There were, however, two exceptions to this with both Hill Rice et al. (1996) and Loke et al. (2012) finding that increased levels of negative support were linked to improved rates of cessation.

The remaining eight studies used alternative measures of network support for quitting, six of which involved compound, multiple-item scales (Collins et al., 1990; Coppotelli and Orleans, 1985; Ginsberg et al., 1991; Gulliver et al., 1995; Kavanagh et al., 1993; McBride et al., 1998) and two of which relied on single-item questions (May et al., 2007; Ockene et al., 1982). All eight studies contained at least one longitudinal analysis, with two also containing cross-sectional analyses (Collins et al., 1990; McBride et al., 1998). The majority of analyses, moreover, focused on partner support, giving rise to a mixed pattern of results. McBride et al. (1998), for instance, demonstrated that positive support was concurrently associated with quitting in early pregnancy, while Coppotelli and Orleans (1985) and Gulliver et al. (1995) showed that overall partner support predicted cessation in the medium term (two to three months), and Ockene et al. (1982) found that quitters whose partners accompanied them to stop smoking sessions had better outcomes at two years. Six studies, in contrast, presented a range of null findings, involving both cross-sectional and longitudinal analyses across multiple time points, in which no association was reported, either in relation to overall levels of partner support (Ginsberg et al., 1991; Gulliver et al., 1995; Kavanagh et al., 1993; May et al., 2007), or in relation to the sub-scales of positive and negative support (Collins et al., 1990; McBride et al., 1998). In addition to these analyses of partner support, two authors also looked at the role of the wider social network. Here, Collins et al. (1990) developed a composite measure of support for quitting among friends and colleagues, showing that levels of network support in the immediate post-quit period predicted quit rates at three and six months, with both positive and negative forms of support having a beneficial effect on outcomes. May et al. (2007), meanwhile, used a series of single-item measures to explore many

diverse aspects of network support, including the adequacy of support from family and friends or whether network members had smoked in front of the participant; out of a total of 24 covariates, only two (having someone to turn to if quitting became a struggle and being offered a cigarette) were found to independently predict cessation at four weeks, and none were identified as being important at 26 weeks.

In a slightly different vein, three studies considered the relationship between various socially motivated reasons to quit and abstinence, showing that pressure to give up from the participant's partner (Loke et al., 2012; Okechukwu et al., 2010), and from their wider network (Baha and Le Faou, 2010) were both associated with higher quit rates. A range of other motivating factors, such as wishing to set a good example and not wanting to cause harm to others, were not, however, found to be linked to cessation.

Overall, therefore, there is some evidence in the literature that social support, whether quit-specific or more general in nature, is related to cessation outcomes, with the majority of studies reporting at least one analysis where an effect was found. It should, though, also be borne in mind that, due to the commonality of multiple testing, the majority of studies similarly reported at least one analysis that failed to find such an effect. The picture is further complicated by a somewhat different pattern of results across cross-sectional and longitudinal analyses; positive findings were far more frequently observed when social support and quit outcomes were measured concurrently. Thus, it is not possible to discern from the existing research whether social support has a causal influence on cessation, whether social support changes in response to the quit attempt, or whether (as seems likely) a combination of both processes is in operation. Moreover, the current predominance of research focusing on romantic partners and on social support, to the virtual exclusion of other relationship and behaviour types, limits our ability to evaluate thoroughly the contribution of social network function to smoking cessation.

3.3.2 Understanding mechanisms

Moving next to consider the 30 papers that explored the various mechanisms underpinning the relationship between social networks and quitting, the balance of methodological approaches was somewhat different to that of the studies aimed at establishing a link, with the majority of articles (18) concentrating on smokers who

were actively engaged in trying to quit (predominantly as part of a randomised controlled trial), and only five using data from national cohort studies to look at changes in the smoking status of the general population. The remaining seven papers involved qualitative designs that were focused either on people who had already given up, or reduced their levels of, smoking (6) or on the smoking partners of pregnant women who were attempting to quit (1). One of the quitter-based studies, moreover, also took a qualitative approach; Koshy et al. (2010) carried out a secondary analysis of data gathered during motivational interviews with pregnant women enrolled in a smoking cessation intervention trial. As result of this difference in the methodological balance, sample sizes were typically on the smaller side, ranging from 10-30 in the case of the qualitative studies, up to 500-600 in the quantitative, quitter-based analyses. This mix of designs did, however, allow a wide variety of issues to be considered.

Refining conceptual understanding

First, several studies sought to refine our understanding of the functional concept of social support for quitting, going beyond the usual positive-negative split discussed in Section 3.3.1. In a study of self-quitters, for example, Cohen and Lichtenstein (1990) looked at the interplay between positive and negative partner support, finding that, whilst the individual scores were associated with cessation in the short-term (three months), only the ratio of scores was significant in the longer term (6 and 12 months), such that higher abstinence rates were seen amongst those who reported a higher proportion of positive relative to negative support. This suggests that it is not the total amount of support that is important but rather the balance of positive and negative behaviours: quitters who typically receive only a minimal amount of support from their partners may still find this helpful if the majority of quit-related behaviours are deemed to be positive. Most other authors, however, found both the individual scores and their ratio to be significant (Danaher et al., 2009; Lichtenstein et al., 2002; Roski et al., 1996), perhaps indicating that the ratio effect merely reflects the influence of the individual measures, although it is impossible to be sure since it appears that separate statistical models were used for evaluating each measure. More recently, Burns et al. (2014) have taken a slightly contrasting approach, building on the work of Barrera (1986) who argued that general social support was not a single construct, but instead an umbrella term for a whole variety of different support types. Applying this

reasoning to the more specific concept of social support for quitting, Burns et al. (2014) showed that a four factor model, which captured the separate notions of emotional and instrumental support, complaints about smoking and criticisms of the smokers, was a better predictor of cessation than the dichotomous positive-negative model.

Interactions between network components

Beyond these attempts to better understand the nature of social support for quitting, a further five articles aimed to explore interactions between structural and functional elements of the social network. All of these, however, concentrated on quitting among pregnant women, limiting the extent to which the findings can be generalised to other populations. The study by Koshy et al. (2010), for instance, found that patterns of behaviour were broadly similar across all relationship types (partners, family and friends), with most network members simultaneously seen as being both a help and a hindrance. Whilst smokers were not perceived as being any less supportive of the quit overall than non-smokers, the particular nature of the network response did vary with smoking status. Thus, some smoking counterparts were viewed as being a source of temptation, smoking in the presence of participants and offering them cigarettes, whilst others sought to be more supportive, attempting to quit in tandem, even if this was only for the duration of the pregnancy. In contrast, non-smokers were described as being more likely to nag and exert pressure to give up smoking; at the same time, though, many were also viewed as being non-judgemental and encouraging, with ex-smokers drawing on their own quit experiences to offer advice and assistance. In addition to Koshy's analysis of the wider social network, three quantitative studies focused more specifically on the relationship between partner smoking status and social support. A cross-sectional study by McBride et al. (1998), for example, revealed that partners who were non-smokers provided more support for quitting during the early stages of pregnancy (10-12 weeks) than did partners who were current smokers; those who were trying to quit alongside the pregnant smoker were shown to be especially supportive. Pollak et al. (2006a,b), moreover, demonstrated that that this differential pattern of partner support for quitting across smokers and non-smokers continued to diverge throughout pregnancy, and was particularly apparent postpartum. In a separate study, however, Pollak and Mullen (1997) found that an interaction between partner smoking status and social support for

quitting was not related to abstinence. A significant interaction was, however, reported between partner smoking and general social support: among those women whose partners provided high levels of emotional and instrumental support, relapse rates were five to six times greater among those whose partners also smoked.

One paper (Ochsner et al., 2015) focused, in contrast, on the interaction between two functional network features, namely social control and social support for quitting; here, the authors focused on smoking-specific social control, defined as being the extent to which partners attempted to directly influence smoking behaviour, and measured using four questions of the form *“My partner tried to influence my smoking behaviour by making suggestions how to reduce smoking or how to quit”*. Whilst neither factor on its own predicted abstinence at four weeks, there was evidence of a *“synergistic”* interaction, such that participants who perceived high levels of social support and high levels of social control were more likely to have quit. Interestingly, low levels of both support and control were, likewise, associated with higher quit rates, whereas a combination of high support/low control or low support/high control led to lower rates of abstinence, possibly suggesting that a consistency of message is important.

Interactions between network and individual factors

In a separate analysis of the same study, Ochsner et al. (2014) broadened the scope of their investigation to look at the relationship between elements of the social network and individual psychological factors, finding increased rates of smoking cessation amongst those smokers who reported higher levels of both social support and self-regulation (covering the three constructs of volitional self-efficacy, action planning and control planning). Once again, though, there was no evidence that social support compensated for a lack of self-regulation. Ginsberg et al. (1991), furthermore, found that better quit outcomes were achieved if couples jointly identified support strategies that focused on the use of self-help techniques that sought to promote the smoker’s behavioural and cognitive coping skills, rather than on more co-operative approaches. Whilst these two authors focused on internal psychological resources, others explored interactions with mental health. Here, several studies demonstrated that the effects of depression on cessation were moderated by various network characteristics, including marital status (Brothers and Borrelli, 2011) and general social support (Lichtenstein et al., 2002; Turner et al., 2008); in contrast,

Pollak and Mullen (1997) found no evidence of an interaction between social support (general or quit-related) and stress. A further four studies, meanwhile, looked at the differential effects of socio-demographic factors on cessation. In relation to gender, for instance, Takagi et al. (2014) showed that having a non-smoking partner increased the chances of success among men but not women, whereas Rohrbaugh et al. (2009) reported that social support had a greater influence on quitting among women. On the other hand, we saw earlier that Weden and Kimbro (2007) demonstrated that, where marriage at any age had beneficial effects on abstinence in black and hispanic smokers, this advantage was apparent only at older ages (mid-twenties and above) in white smokers. Socioeconomic differences in cessation, moreover, were found to be mediated by levels of social participation (i.e. the degree to which smokers take part in informal and formal social groups) but not by levels of social anchorage (sense of belonging), emotional, or instrumental support (Lindstrom et al., 2000). Adopting a somewhat different approach again, Chandola et al. (2004) and Christakis and Fowler (2008) explored the relationship between network behaviour and individual behaviour, finding not only that smoking and quitting behaviours were clustered at the level of the household (Chandola et al., 2004), but also that quitting was a collective rather than an individual phenomenon, with whole groups of smokers quitting together (Christakis and Fowler, 2008).

Interactions between network members

Thus far, the emphasis has largely been on the exploration of statistical interactions between different social network components, or between the social network and individual factors, such as socio-demographic or psychological characteristics. I turn now to a somewhat different form of interaction, the interactions that take place between the people in a social network. At their most straightforward, analyses of such interactions simply recognise that the perceptions of the person giving support, and the perceptions of the person receiving that support might not always coincide. Danaher et al. (2009), for example, in an update of an earlier analysis (Lichtenstein et al., 2002), compared the PIQ-20 scores of male smokeless tobacco users who were attempting to quit with those of their wives, demonstrating a moderate degree of correlation between the two ratings. Both delivered and received support were, furthermore, found to be predictors of quitting at six and 12 months, although it is not clear whether an assessment was made of the extent to which each measure made an

independent contribution to cessation. Others, in contrast, have gone further, seeking to shed more light on the precise ways in which perceptions differ, and to assess the impact that such differences have on outcomes. In a cross-sectional study of pregnant couples, for instance, Pollak et al. (2001) found that partners typically report giving more positive, and less negative, support than their wives describe receiving, leading the authors to conclude that attention should be paid to developing couple-based interventions that help pregnant women to solicit the support they need from their partners. In a later study, moreover, Pollak et al. (2006a) showed that, whilst individual ratings of partner support for quitting during early to mid-pregnancy did not predict abstinence several months later, certain combined measures of positive support (sum of quitter and partner scores; lowest of the two scores) were associated with quit outcomes. Luscher et al. (2015), on the other hand, argue that invisible (delivered minus received) support might be more beneficial than overt support since the latter has the potential to impact negatively on self-esteem; their daily diary study of self-quitters found, however, that increased invisible support was, in fact, associated with an increase in the number of cigarettes smoked. These findings may, therefore, lend weight to Pollak et al.'s (2001) suggestion that we should seek to better align quitter needs and partner responses. Luscher et al. (2015) point out, though, that their results might also reflect a complex pattern of interactions in which the partner, for instance, adjusts their support depending on the degree to which they perceive the quitter to be struggling.

We can begin to see, therefore, that perceptions of support (whether given or received) are likely to form only a small part of the myriad meanings that quitters and their social networks attach to the unfolding process of smoking cessation. Here, the eight qualitative studies (six of which focused on quitting in pregnancy) came to the fore, aiming to tease out the various layers of meaning that surround a quit attempt, meanings that are themselves embedded within the wider, and ever-changing, cultural norms and expectations of the specific population being studied. First, quitters were seen to try and make sense of family and friends' responses to their giving up smoking. In an interview-based study with Taiwanese women who had stopped smoking during pregnancy, for example, Wang et al. (2014), found that the women felt largely abandoned and isolated by their smoking husbands: whilst all the participants had been asked by their partners to quit, the husbands were generally seen as being lacking in empathy, and as ignoring the difficulties that the women faced both in terms of withdrawal symptoms (especially when their husbands continued to

smoke in their presence) and in terms of having to relinquish a “*life pleasure*”. The women also appeared to feel that their partners were refusing to accept any responsibility for protecting their baby from the effects of passive smoking. This theme of enforced isolation was, likewise, picked up in a study of Chinese quitters (Zhang et al., 2012) in which participants described how smoking friends had started to distance themselves once they stopped smoking. Wakefield et al. (1998) were the only authors who attempted to explore social network members’ understandings of quitting, conducting a series of focus groups with Australian male smokers whose wives were pregnant, and finding a degree of concordance with the results of Wang et al. (2014). Even though the men in this study acknowledged that their continued smoking might make it harder for their partners to quit, the only help that most were prepared to give was encouragement; just a few had offered to quit in tandem, with the others arguing that having one stressed person in the household was more than enough. Some of the men had, furthermore, suggested that their wives return to smoking, pointing out that the combined emotional upheaval of pregnancy and quitting was simply too much. It is worth bearing in mind, however, that this study by Wakefield is now nearly 20 years old and may, therefore, no longer reflect the attitudes and actions of Australian men today.

In contrast, several other studies highlighted the socially embedded nature of quitting: not only were quitters seen to attach meaning to the actions of their social network, but the way in which they made sense of their quit attempt was shaped by the meanings that imbued their networks more generally. These broader meanings were related, moreover, both to the established practices of smoking as well as to the (culturally-specified) fabric of their wider social relationships. A number of authors emphasised how the meanings that quitters attached to smoking could, in fact, have negative consequences for cessation. In their study of postpartum relapse among new mothers, for instance, Nguyen et al. (2012) showed that the considerable value placed on social smoking was potentially a major obstacle to maintaining abstinence, since smoking was variously perceived as providing an opportunity to socialise and bond with network members (a point also noted by Koshy et al. (2010)), to share problems, and to network. Interestingly, the women in this study also appeared to feel that pregnancy gave them a temporary respite from the social pressure to smoke but that friends would expect them return to smoking now that the baby had been born. Zhang et al. (2012), moreover, described how quitters in China reported feeling a loss of social status when they stopped smoking; furthermore, as cigarettes were traditionally

offered as a mark of respect, quitters found it particularly difficult not to accept them as a gift for fear of appearing impolite. There was also evidence that the wider meaning of social relationships, beyond the immediate environs of smoking, was similarly important, with filial (e.g. showing respect to one's parents) and familial (e.g. being a role model to one's children) duties serving to reinforce sustained quitting among Chinese Americans (Tsang et al., 2014). The one quantitative study that noted the relevance of the wider relationship context to quitting, looked at differences in the levels of expected (which are likely to be rooted in appraisals of wider behavioural patterns) and received partner support, finding that, whilst overall levels of social support were lower than anticipated, the balance of support was more positive than expected (Cohen and Lichtenstein, 1990).

Overall, therefore, there is a growing body of literature suggesting that interactions between people might comprise a key component of social network influences on quitting, with a range of studies highlighting the differences in perception that can arise between network members, and the importance of the wider relationship context, both smoking-related and more general, in shaping these perceptions. Indeed, a number of studies have begun to provide evidence of a highly complex and dynamic interactive process. Several authors have, for instance, examined the ways in which quitters seek to develop strategies for managing their social networks. Although some quitters take a relatively passive approach, simply planning to avoid situations in which network members will be smoking (Koshy et al., 2010; Nguyen et al., 2012), others appear to take a much more active role in trying to minimise their exposure. This is best exemplified by the work of Wang et al. (2014), who found that the pregnant women in their study took an increasingly interventionist approach to mitigating the difficulties caused by their husbands' ongoing smoking: creating a non-smoking space to which they could retire, if necessary; persuading their husbands that this space needed to be thoroughly cleaned and refurbished, thereby ensuring that it would remain smoke-free because of the time and expense involved; constantly reminding their husbands that they should not be smoking in front of them (even, in one case, confiscating lit cigarettes as they were being smoked); and establishing rules that would limit their exposure to the smell of cigarette smoke, requiring their husbands to wash their hands, take a shower or change their clothes when they came into the house. Balanced against this, the women were reluctant to demand that their husbands quit, being careful to avoid accusations of hypocrisy because of their own smoking histories, recognising that quitting was extremely hard and, therefore,

needed to be a personal decision, and not wanting to harm their wider relationship.

Bottorff et al. (2005, 2006), meanwhile, took a somewhat different approach, conducting in-depth interviews with 28 pregnant women and their partners in order to explore directly patterns of interaction around smoking and quitting. In an initial analysis, they focused on understanding the nature of the couples' everyday routines in relation to smoking prior to pregnancy, identifying three main behavioural profiles or tobacco-related interaction patterns (TRIPs) (Bottorff et al., 2005). The first such profile, labelled as *accommodating*, saw smoking being integrated into wider daily routines, either as a shared activity or with non-smokers assuming responsibility for certain household tasks so as to allow their partners the opportunity to smoke. This profile was further characterised by a responsive and non-confrontational style of communication. In contrast, within the *disengaged* TRIP, smoking was viewed as being an individual behaviour around which there was only limited discussion, whereas the *conflictual* pattern of interaction typically involved a non-smoker attempting to regulate and control the behaviour of their partner, sometimes leading to disagreement and argument, with the result that smoking often became a hidden and secret activity. Bottorff et al. (2006) subsequently followed this with an analysis of the differential experiences of quitting across these three interactive profiles. Here, perhaps, the most straightforward process of adjustment was seen amongst the conflictual group, where quitters welcomed the greater degree of household harmony and drew extra motivation from not wanting to return to the previous more confrontational environment. In contrast, quitting proved to be more equivocal for the accommodating group. On the one hand, established practices of openness and sharing around smoking meant that these couples were able to jointly agree new patterns of interaction, whilst at the same time acknowledging that the quit attempt would have an impact on both their lives. On the other hand, partners had to tread the fine line between trying to be supportive without appearing to exert too much pressure. Such couples also tended to place particular value on maintaining the balance of their relationship and did not, therefore, always consider quitting to be paramount. The most dramatic changes, however, were evident within the disengaged group; where before, smoking had very much been an individual pursuit, quitting now became a battleground. In some cases, non-smoking partners who had previously said little now sought to monitor and regulate their wives' smoking and, in others, the pregnant quitters attempted to push their partners into giving up as well.

3.4 Summary

Where in the previous chapter I sought to provide a brief introduction to the field of social network studies in health, setting the scene for my thesis and highlighting the main theoretical and methodological issues of relevance, in this chapter I have striven to present a more comprehensive and rigorous evaluation of the literature with regards to one specific area of this broader field, namely the relationship between social networks and smoking cessation. Here, my aim was to develop a feel for the research base as a whole, identifying the key emergent themes, as well as drawing attention to those issues where there is either a lack of consensus or a lack of evidence. I, thus, chose to combine a systematic search of the literature with a narrative review, using a multi-item search strategy, similar to that outlined by Holt-Lunstadt et al. (2010), to capture research articles covering the many, and wide-ranging, components of the social network. This led to the identification of a total of 65 papers, 47 of which were concerned with establishing a link between social networks and quit outcomes, and 30 of which attempted to shed light on the mechanisms connecting networks and smoking cessation. Across these articles, secondary data analyses were seen to predominate, with most studies drawing either on population-based cohort or on cessation intervention studies; a significant minority of the mechanism-related papers did, though, adopt qualitative designs.

In terms of the results, a somewhat unclear picture emerged in relation to the link between the social network and quitting; although the majority of studies described at least one analysis in which an effect was found, many also reported null findings, with considerable variation in the particular elements of the network, and in the particular parts of the quit process, for which evidence of association was reported. Thus, whilst the literature does suggest that social networks and successful cessation are linked, it falls far short of providing a consistent and coherent body of research regarding the specifics of the relationship. The strongest evidence exists with respect to marital status, where there appeared to be a general consensus that being married was beneficial for quitting. Beyond this, however, a more variable pattern of results was seen relative to the three most commonly examined aspects of network structure (partner smoking status) and function (general social support and partner support for quitting). It was, nevertheless, noticeable that cross-sectional analyses of these factors were more likely to demonstrate an effect than longitudinal analyses, perhaps

suggesting that the social network not only helps to shape quit outcomes, but is itself shaped by the process of quitting. Moreover, despite the complex and multidimensional nature of the social network, articles exploring other components of network structure and function were relatively rare.

Studies that looked to elucidate the possible underlying mechanisms were, in contrast, much more wide-ranging, although there was a tendency for such analyses to focus on quitting in pregnancy. On the one hand, several authors attempted to improve our conceptual understanding of social support for quitting, showing not only that such support is comprised of a number of subcomponents, but also that the balance of these different types of support might be more important than the total amount. The majority of studies, though, focused on exploring the nature of the various interactions that take place within the social network. Here, there was some evidence that elements of the social network interacted both with each other (e.g. partner smoking status and levels of general or quit-related social support) and with individual psychological, socio-demographic and behavioural characteristics (e.g. partner status and gender, or the timing of marriage and ethnicity); the vast number of interactions that is possible to explore, however, means that each particular combination of factors was considered by only one or two studies, making it difficult to identify any recurring themes within the literature. Whilst analyses of the interactions between network members were similarly diverse, there were nevertheless suggestions that these interpersonal exchanges were experienced at multiple levels, including the immediate interactive episode, the wider context of the quit, the established practices of smoking, the fabric of their social relationships, and the broader social and cultural norms that serve to shape behaviour. Thus far, however, there appears to have been no attempt to explore these different levels of experience in a more integrated fashion.

Taken together, therefore, these results point to three areas in which the literature on social networks and smoking cessation could be further developed and improved. Firstly, the considerable variability and lack of consistency in the findings might suggest that current social network measures are inadequate in relation to quitting. In this regard, a number of issues were particularly apparent: (1) there was a general tendency to restrict the focus of study to the partner only, overlooking the potential importance of the wider social network; (2) analyses of network structure drew almost exclusively on simple, single-item measures and made very limited use of more complex approaches; and (3) analyses of network function centred around the

availability of social support, largely ignoring other forms of network behaviour. There is a sense, furthermore, that these problems are due, at least in part, to an over-reliance on secondary data analysis which has restricted our ability to investigate fully network complexity and multidimensionality. This then brings us to the second area in which the existing literature could be usefully developed. Although various authors have sought to explore different forms of interaction across the social network, recognising that the elements of the network do not operate in isolation, the sheer number of potential interactions means that research in this area is too thinly stretched. There is an implied assumption behind these analyses, moreover, that is possible to identify individual interactions, with a view to combining them into a comprehensive model. It seems unlikely, however, that such a reductionist approach will ever truly capture the complex nature of our social networks. Instead, we need to develop alternative methodologies that will allow a sense of the network as a whole to be retained; here, Ross et al. (2013) have suggested that qualitative approaches may be particularly appropriate for the study of network complexity. Whilst several authors have, indeed, used such approaches to explore in detail the nature of interactions between social network members during a quit attempt, these studies have, thus far, tended to focus on interactions with romantic partners during pregnancy, and have not, as mentioned above, sought to develop a more integrated understanding of all aspects of the network. The third, and final, area in which the literature could be extended relates to the differential pattern of results observed across cross-sectional and longitudinal analyses. Throughout this chapter, we have seen that concurrent measures of the social network were more likely to be associated with quit outcomes than prospective measures. This should not, however, simply be taken to imply that social networks are unimportant but rather seen as hinting at a more dynamic process in which interactions between the quitters and their social network members are two-way, with each responding and adapting to the other as the quit attempt proceeds.

Across Chapter 2 and Chapter 3, we have therefore seen that a predominantly quantitative and positivist approach has, thus far, been taken to the study of social networks and health behaviour change, in which there is a general assumption that the network can be objectively measured and that theoretical advancement can be best achieved through hypothesis testing and the identification of cause-effect relationships (Snape and Spencer, 2003). As yet, however, and despite a broad research literature, our conceptual understanding in this area is still far from complete and each new study appears to do little to advance our overall thinking, suggesting

that we may benefit from a paradigm shift in our approach. With this in mind, the current thesis assumes a critical realist perspective which seeks to embrace (rather than controlling for) the complexity of social phenomena, aiming to develop detailed conceptual frameworks that allow for deep and rich explanations of human social behaviour (Clark, 2008). In this view, moreover, our knowledge of such social phenomena is seen as being partial, imperfect and socially constructed, filtered as it is through the lenses of individual participants and researchers (Snape and Spencer, 2003). As a result, I adopt a qualitative approach to the present study which aims to develop our understanding of the role that social networks play in one key area of individual health behaviour change, namely smoking cessation. In seeking to address this overall aim, furthermore, I shall focus on a number of specific objectives:

- Objective 1:** To consider how our conceptual understanding of the mechanisms linking social networks and health behaviour might be extended to better reflect the challenges of smoking cessation and individual health behaviour change.
- Objective 2:** To investigate the processes by which the different elements of the social network combine to jointly influence smoking cessation.
- Objective 3:** To explore the ways in which the smoker and their social networks together adapt and change over the course of a quit attempt.
- Objective 4:** To identify areas in which existing methods for the study of social networks and smoking cessation might be expanded and enhanced.
- Objective 5:** To gain insights into how smoking cessation interventions might be developed to more effectively harness social networks in order to improve quit outcomes.

CHAPTER 4

Methodological approach

4.1 Introduction

This, then, brings me to a detailed description of the research methodology employed in the empirical component of this thesis. I shall start by outlining my rationale for adopting a critical realist perspective (Section 4.2). From here, I shall set out the overall research design and specific data collection methods used (Section 4.3), before going on to describe the procedures through which the participants were recruited, briefly outlining the socio-demographic characteristics of the final sample (Section 4.4). Next, I shall detail my analytical approach, considering the implications of my chosen methodology for the validity and generalisability of the results (Section 4.5), and concluding by reflecting on my own role within this research study, touching upon the different power relations that arose between me and the participants, and considering how my interests, beliefs and history have helped to shape the findings (Section 4.6).

4.2 Ontology & epistemology

Sitting between the positivist and social constructionist research paradigms, the critical realist approach has its roots in the early work of Roy Bhaskar (Clark, 2008),

taking the ontological stance (i.e. beliefs about the nature of the world) that social phenomena exist externally and independently of human understanding, and the epistemological stance (i.e. beliefs about how we come to know the world) that knowledge is not value-free but socially negotiated and shaped by the researcher's underlying assumptions (Snape and Spencer, 2003). Nevertheless, Clark (2008) stresses that, within critical realism, the emphasis is very much on ontology and elucidating the nature of reality. Thus, critical realism can be seen to share an ontological position with the positivist research philosophy but an epistemological position with the constructionist philosophy. Alvesson and Skoldberg (2009), moreover, point out that positivism and critical realism are both concerned with the development of theory, albeit using somewhat different approaches: positivism seeks to advance our theoretical understanding through a cycle of hypothesis setting and testing (Snape and Spencer, 2003), while critical realism looks to shed light on the complex causal mechanisms that underpin human social behaviour through deep and rich explanation (Clark, 2008). In this way, critical realism is concerned with understanding social phenomena within a real-world context, seeking to embrace the inherent complexity, rather than looking to control and reduce such complexity artificially, as in the positivist approach (Clark, 2008). Throughout the previous two chapters, I have sought to emphasise the complex and multidimensional nature of the social network construct, arguing that our understanding of the link between social networks and health behaviour change is being held back by an inadequate conceptualisation and theorisation of the mechanisms involved. Thus, with its focus on complexity, conceptualisation and explanation (Clark, 2008), the critical realist perspective provides an ideal basis from which to approach this thesis.

4.3 Study design & data collection methods

A longitudinal, qualitative research design was used in which in-depth interviews were undertaken with adult clients of NHS stop smoking services from the Forth Valley area. Integral to this design, therefore, are a number of separate elements, each of which requires its own explanation. First, my choice of a qualitative methodology stems primarily from the suitability of such methods for the study of complex, multidimensional phenomena (Curry et al., 2009), and for the exploration of the mechanisms and processes that help to shape behaviour, particularly as they unfold

over time (Hollstein, 2011; Ross et al., 2013). Alongside this, Curry et al. (2009) point out that such approaches have a valuable role to play in the construction of quantitative measurement instruments that better capture the experiences of the individual. Thus, a qualitative design can be seen to fit well both with my beliefs about the nature of the social network, and with the specific objectives of this study.

Furthermore, since my eventual aim is to develop smoking cessation interventions that more effectively support the individual, I decided that my focus should be on the experiences and understandings of the quitter. As a result, I opted to undertake in-depth interviews, a method which Ritchie (2003) suggests is ideally suited to the study of person-level understandings, and which allows these understandings to be placed within the context the individual's wider personal history (Lewis, 2003). This open-ended approach to questioning had the added advantage of giving participants the opportunity to talk about their networks in a way that made sense to them, without the need to impose a common conceptual framework for the social network across all interviewees (see Section 4.3.1 below for more details).

The inclusion of a longitudinal element, moreover, brought several benefits. On the one hand, it was possible to examine changes in the ways that participants experienced, and made sense of, their social network responses during the first few months of them stopping smoking, whilst at the same time ensuring that their accounts of the early days of the quit were not overshadowed by the eventual outcome (Farrall, 2006). On the other hand, it enabled a greater degree of rapport and trust to be built across interviews, thereby encouraging participants to relax, and allowing me to return to key issues and explore them in more detail (Barbour, 2008).

In turn, the decision to incorporate a longitudinal element led to a focus on clients of NHS stop smoking services, as it was felt that gaining access to sufficient quitters at the outset of their cessation attempt was only likely to be practical through such dedicated services, particularly given the commonality of quit attempts that are unplanned and spontaneous (Murray et al., 2009). As just a third of quitters in Scotland seek help from a stop smoking clinic or helpline (Scottish Government, 2015c), it was recognised that this selection strategy may limit the extent to which the findings are applicable to self-quitters; on balance, however, the trade-off was deemed acceptable to enable the exploration of changes in the pattern of social network interactions over the course of the quit.

Finally, the geographical situating of this research within the Forth Valley area reflects the largely theoretical nature of this study, which aims to advance our understanding of the mechanisms and processes underpinning the relationship between social networks and smoking cessation, rather than to investigate the experiences of any one population group. With this in mind, Forth Valley appeared to be an appropriate choice of location since its socio-demographic profile (Scottish Government, 2015d) and smoking prevalence (NHS Health Scotland et al., 2007) are broadly similar to those for Scotland as a whole.

4.3.1 In-depth interviews

Turning now to the specifics of the in-depth interviews, I elected to meet with participants on two separate occasions, the first as soon as was practicable after the quit date (and, wherever possible, within four weeks of the participant stopping smoking), and the second approximately 13 weeks after the quit date, reflecting the current target for Scottish smoking cessation services which focuses on outcomes at 12 weeks (Scottish Government, 2015a), but allowing an extra week beyond the end of pharmacological treatment to pick up on any problems encountered once medication had stopped. Thus, in the terminology of the stages of change model (Prochaska et al., 1992), the aim was to interview people first during the early days of their quit when they were still in the action phase, and then again several months later when they had moved to the maintenance phase.

In keeping with the philosophy of the in-depth approach (Legard et al., 2003), the interviews were structured flexibly in order to encourage participants to talk, in their own words, about their experiences of trying to quit smoking. The initial interview fell into two main parts, with the first half focusing on gaining a broader understanding of the participants' lives and building up a picture of their social networks through an interactive mapping exercise, and the second half exploring the specifics of the quit attempt, the part played by family and friends and, where relevant, the circumstances of relapse. These latter questions also formed the basis of the follow-up interview, although here there was an added emphasis on how social network responses had changed as the quit attempt progressed (See Appendix B.1 for the outline topic guide).

Legard et al. (2003) point to the importance of developing a rapport with participants and creating a relaxed atmosphere that is conducive to the interviewee opening up about their thoughts and experiences. With this in mind, each interview was undertaken in a location of the participant's choosing to ensure that they felt as comfortable as possible: here, nearly everyone opted to be seen in their own homes, although several preferred to meet at a local cafe or pub, and one asked that the interview be conducted at their health centre. Throughout the interviews, I sought to adopt a friendly yet professional manner, starting by making general conversation to help put them at their ease, before turning the conversation towards the study, enquiring whether they had any further questions about what was involved and whether I could digitally record our discussion.

Once I had confirmed that they were happy to proceed, I opened the initial interview by asking them to tell me a bit about themselves, partly to help overcome any feelings of self-consciousness at having to talk about themselves, and partly to provide contextual information about their wider lives. Next, we moved on to the social network mapping exercise, which served the dual purpose of introducing their family and friends into the conversation in a non-threatening way, and also of providing a focal point for our later discussion. Coming to the heart of the interview, I simultaneously looked to explore how the participants had found the experience of quitting, and to gain an understanding of the ways in which their social networks had been a help or a hindrance (or both). To end the interview on an upbeat note, I asked the participants to reflect on their plans for the next few months in relation to quitting. As at the start of our meeting, I finished with several administrative tasks (including checking whether I could contact them again in a two months' time and giving them a gift voucher in thanks for their time), wishing them well with their quit attempt, and making general conversation as I packed up my belongings. A largely similar format was, likewise, adopted for the follow-up interview (minus the mapping exercise) although, here, the participants typically appeared much more relaxed in meeting me for a second time and, thus, needed less time to settle into the interview.

All the participants agreed to me digitally recording the interviews; the recordings were then transcribed by a colleague at the University of Edinburgh who has considerable professional experience and expertise in this area. Alongside this, I kept a research diary in which I made a note of my impressions and observations immediately after each interview, as well as recording my more general thoughts and

reflections as the data collection and analysis phases of the study progressed.

4.3.2 Social network mapping

A range of different approaches have been adopted to social network mapping, including: the use of structured name generator and name interpreter questions aimed at identifying network members and the links between them; the completion of research diaries to record all network interactions over a given period of time; and the analysis of written information such as membership lists, activity on social networking sites and personal letters (Heath et al., 2009). Various authors have, in contrast, used visual mapping techniques, with some using a bullseye-style format where network members were placed within concentric circles according to their degree of closeness (Antonucci et al., 2014), and others using a blank-sheet approach in which participants were entirely free to map out their networks as they saw fit (Emmel and Clark, 2009).

Within the current study, the social network mapping exercise was used both as device to allow participants to become comfortable in talking about their family and friends, and as a reference guide to which we could refer when discussing the specifics of their quit attempt. As such, it was less about trying to capture the network in a robust and comparable manner across all participants, and more about seeking to set the cessation attempt within the context of the social network. I, therefore, opted to use a variant of Emmel and Clark (2009)'s blank-sheet approach, asking participants first to write down the names of network members on post-it notes, then to organise these post-it notes on flip-chart paper in whatever way that made sense to them, and finally to mark out any current and former smokers using coloured dots. Where Emmel and Clark (2009) were able, however, to devote the whole of the interview to the mapping exercise, I had to leave sufficient time for a detailed discussion of the quit attempt itself. With these time constraints in mind, I prompted participants to think about four everyday relationship categories in particular, namely family, friends, work colleagues and fellow members of any clubs and societies to which they belonged; I did not, however, impose rigid definitions on these categories, instead encouraging participants to describe how they were applying these terms as they went along (in the manner advocated by Widmer (2006)). During the remainder of the interview, moreover, participants were seen to go back to the mappings and add people in as they cropped up during our conversation.

4.4 Recruitment & participants

4.4.1 Recruitment procedures

Six NHS stop smoking services (three dedicated and three pharmacy-based) agreed to help with recruitment to the study (Table 4.1); these services covered the three main towns in the Forth Valley area, namely Alloa, Falkirk and Stirling. The three dedicated services, moreover, provided rolling group support, with clients continually joining and leaving the group so that the membership contained a mix of new and more established quitters, whereas the pharmacy-based services all provided one-to-one support. For ethical reasons (see Section 4.4.2 below), eligible clients had to be identified and approached, in the first instance, by stop smoking advisors from the participating services.¹ Prior to the start of recruitment, I met with the cessation advisors to give them an overview of the study, to talk them through the planned enrolment process, and to provide them with a supply of the necessary study documentation.

Table 4.1: List of participating NHS stop smoking services

Type of service	Area of Forth Valley	Name of service
Dedicated	Alloa	Clackmannanshire Community Healthcare Centre
	Falkirk	Camelon Health Centre
	Stirling	St Ninian's Health Centre
Pharmacy	Alloa	National Co-op Pharmacy
	Falkirk	Lloyds Pharmacy
	Stirling	Tesco Pharmacy

Once the advisor had identified an eligible client, they briefly took them through the participant information sheet (Appendix B.2), answering any questions that arose at that point. If the client indicated that they might be interested in taking part, the stop smoking advisor asked them to sign a preliminary consent form (Appendix B.3), giving permission for their contact details to be passed on to me, and forwarded the form in a stamped addressed envelope. After two to three days, I then contacted the potential participant, by their preferred means (phone, text or e-mail), to answer any

¹Throughout this thesis I use the term “advisor” collectively to refer both to the staff of the dedicated cessation services and to the participating pharmacists.

further questions and to arrange the interview at a time and location of their choosing. Immediately prior to the initial interview, I sought confirmation that the participant was still happy to proceed, addressed any outstanding issues, and requested that they read and sign the main consent form (Appendix B.4). At the end of this first interview, participants were asked whether they were happy to be contacted again in approximately 8 weeks to arrange a further follow-up interview. In appreciation and reimbursement for the participants giving up their time, they were given a £5 Love2shop gift voucher for taking part in the first interview and a £10 voucher for taking part in the second.

4.4.2 Ethical considerations

As participants were recruited through the NHS stop smoking services, it was necessary to obtain approval from the National Research Ethics Service (NRES) and from the local NHS Forth Valley Research & Development Office. Applications for such approval were made via IRAS, the Integrated Research Application System, with help and guidance on how the study might best be implemented from key smoking cessation service staff in the Forth Valley region, including the senior health promotion officer for smoking cessation, the lead pharmacists for community care and for public health, the NHS research & development officer, together with a stop smoking advisor from the Falkirk service. One particular issue identified here related to the procedures for recruiting participants. The Data Protection Act requires that explicit patient consent is required before the NHS can share identifiable data with staff from other organisations; moreover, non-NHS staff cannot approach patients within an NHS service without their prior consent. It was, therefore, agreed that the NHS stop smoking advisors would be responsible for the initial identification of potentially eligible clients, as outlined above in Section 4.4.1.

Procedures were, similarly, put into place to ensure confidentiality and anonymity, with a unique code number being allocated to each participant. This code was then used as the sole identifier for all information collected in relation to that participant. Furthermore, pseudonyms have been used throughout this thesis, both for the participants themselves and for any of their social network members who were mentioned within the interviews.

Beyond this, it was felt that there was minimal risk to the participants, partly because the primary focus of the study (giving up smoking) was not in itself a sensitive topic, and partly because the qualitative nature of the interviewing gave participants a degree of control over the precise topics of discussion. Furthermore, prior to the interviews, participants were informed both that they could withdraw from the study at any time and that they could choose not to answer specific questions.

My NRES application was submitted on 23 August 2012; I received permission to proceed from the South Central (Portsmouth) Research Ethics Committee on 30 August 2012, and from the NHS Forth Valley Research & Development Office on 11 October 2012 (see Appendix B.5 for copies of the approval letters).

4.4.3 The sample

Clients of community-based NHS stop smoking services in the Forth Valley region, who were aged between 25-64 years old and who had quit smoking within the last four weeks (regardless of whether they had since started smoking again), were eligible to take part. The age restriction was applied both to focus attention on those with a more established smoking routine, and to avoid situations in which the quit was prompted by an acute health problem. A number of other exclusion criteria were also applied, reflecting the time and budget constraints of this PhD, which meant that it was not possible to employ interpreters, translators or other support staff to assist with the study. The complete set of inclusion and exclusion criteria are set out in Table 4.2 below.²

Sandelowski (1995) argues that, within qualitative research, decisions regarding what constitutes an adequate sample size should be based around the specific goals of the research and around the quality of the data collected in relation to the purposes to which it is to be put. Thus, the final number of cases will depend, at least in part, on an assessment of the actual data obtained. Ritchie et al. (2003) also point out that a balance must be struck between having sufficient cases to ensure that key groupings

²One of the participants (Angus) did not strictly meet the eligibility criteria: he was slightly older than the target age range and had not managed to completely stop smoking by the time of our first meeting. I, nevertheless, decided to include him because, on the one hand, he was in good health and was not attempting to quit as a result of an acute health problem and, on the other, he very much viewed himself as being in the process of giving up smoking.

Table 4.2: Study eligibility criteria

Reasons for inclusion/exclusion	
Inclusion criteria	Attending NHS stop smoking service Aged 25–64 years old Quit smoking within the last four weeks
Exclusion criteria	Does not speak fluent English Lack of basic reading and writing skills Severe visual or hearing impairment Not capable of giving informed consent

and a diversity of experience are covered whilst, at the same time, not having so many cases that a full and detailed analysis of the available data becomes impossible. For Ritchie et al. (2003), moreover, there is “*a point of diminishing return where increasing the sample size no longer contributes new evidence*” (p. 83).

The primary goals of this thesis were exploratory in nature, with the main aim being to identify areas in which existing conceptualisations of the mechanisms linking social networks and health behaviour change might be usefully extended; indeed, the focus was not on comparing and contrasting different groups of quitters, but rather on highlighting those aspects of individual experience which were not adequately addressed by current theoretical models. With this in mind, it was felt that the emphasis should be on a close examination of the experiences of a relatively small number of quitters in order to capture the full complexity of their social networks, as opposed to undertaking a more superficial analysis of the network across a wider spectrum of people. Here, then, we can see some resemblance to more phenomenological approaches, where the aim is to provide a rich description of individual experience (Holloway, 2007) and where samples sizes of between five and ten are typically deemed sufficient to identify aspects of experience that have not previously been explored (Sandelowski, 1995).

I, therefore, adopted a purposive sampling strategy centred around the participants’ quit status at follow-up, aiming to eventually capture a mix of abstainers and relapsers at the second interview. In addition, I sought to recruit a spread of female and male participants, as well as to obtain representation from across the age range. Due to the lag between initial identification and follow-up, I recruited participants in two blocks,

at the end of which my sample included participants with a range of different quit outcomes. Moreover, once the analysis was underway, it was felt that the depth and quality of the data were sufficient for my requirements, and that it was not necessary to undertake a further batch of recruitment. Overall, therefore, I undertook 22 interviews across 13 individuals, including: four participants who were still quit by the time of the follow-up interview; one who had lapsed temporarily but then quit again almost immediately; three who had fully resumed smoking; and one who cut down his consumption considerably but never managed to stop completely (the remaining four did not respond to my requests for a further interview).

It is, however, worth noting that recruitment proved to be somewhat patchy, with several stop smoking advisors reporting that their clients were generally reluctant to sign up, although no specific reasons for this were given. A number of potential reasons do, though, spring to mind, including the possibility that I was viewed as an anonymous researcher from Edinburgh about whom they knew very little, or that there was a hesitancy amongst quitters to take part in a follow-up study when there was a significant chance that they would not succeed in their attempt to stop smoking. The difficulties of recruitment were particularly acute, moreover, in the pharmacy-based services where only one client agreed to join the study; it is possible that those quitters who opted to use the dedicated services (which involved group behavioural support) were more likely to be interested in a research study about social networks.

I turn, next, to provide a brief description of my final sample, outlining their main socio-demographic characteristics. The thirteen quitters came from a diverse range of backgrounds (Table 4.3). Approximately a third were males, and the participants were aged between 30 and 69 years old, with similar age ranges for both genders (Figure 4.1).

Socioeconomic background was assessed using two different indicators: the Scottish Index of Multiple Deprivation or SIMD (Scottish Government, 2012), an area-based measure derived from an individual's postcode, and the National Statistics Socioeconomic Classification or NS-SEC (Office of National Statistics, 2010), derived from occupation. Of the nine participants for whom the SIMD was available (Table 4.3), seven lived in areas that fell into the 40% most deprived areas covered by the Local Development Plan target (Scottish Government, 2015a) for smoking cessation in Scotland, with three interviewees living in the most deprived areas (Douglas, Angus and Hazel). There was generally a good correspondence between

Table 4.3: Socio-demographic characteristics of participants

Pseudonym	Gender	Age Group	SIMD ¹	NS-SEC ²
Nadia	Female	30–39	5	3
Paula	Female	30–39	7	6
Colette	Female	40–49	5	4
Catriona	Female	40–49	n/a	2
Heather	Female	50–59	7	2
Lynn	Female	50–59	8	3
Hazel	Female	50–59	10	8
Hannah	Female	50–59	n/a	6
Sarah	Female	60–69	n/a	2
Alex	Male	30–39	7	6
Dan	Male	40–49	n/a	4
Angus	Male	60–69	10	2
Douglas	Male	60–69	10	8

¹ Scottish Index of Multiple Deprivation (1: least deprived to 10: most deprived); SIMD could not be assigned in 4 cases because the full postcode was not available

² National Statistics – Socioeconomic Classification (1: highest to 8: lowest)

the two socioeconomic measures, with a number of notable exceptions (Lynn, Angus and Heather); these three participants were all (or had been in the case of Angus) employed in occupations that put them into a much higher socioeconomic bracket than indicated by their area of residence. In the latter two cases, this fits with my subjective impression of their neighbourhoods, where both lived in small modern estates of detached houses that were on the edge of poorer areas. As with age, the range of NS-SEC scores was similar across both genders (Figure 4.1).

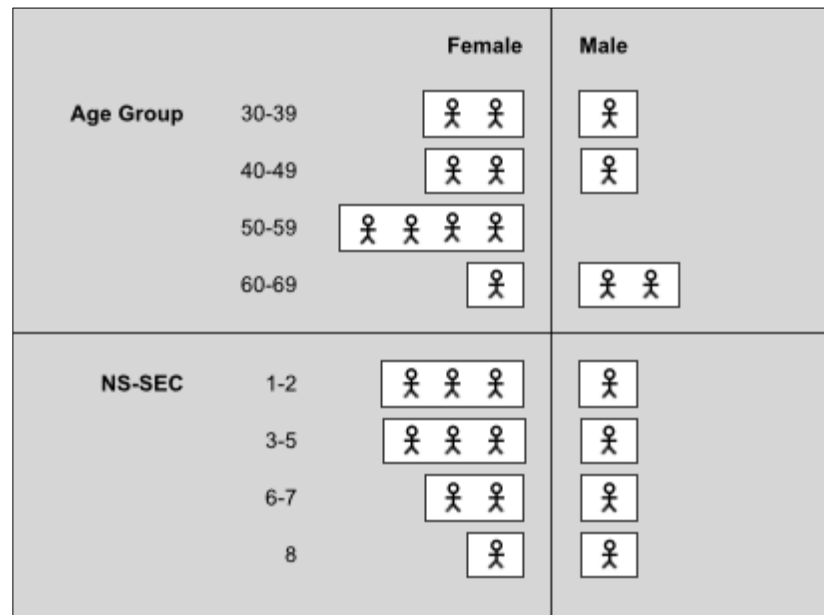


Figure 4.1: Socio-demographic characteristics by gender

4.5 Analytical approach

With its primarily ontological focus on understanding the nature of reality and on explicating how social phenomena can impact on behaviour, critical realism does not espouse a particular methodological or ideological approach, but rather highlights a number of key steps that are commonly found in such studies, beginning with a thorough conceptualisation of the underlying phenomena in all its complexity, leading to a detailed description of the ways in which the phenomena is experienced, and finally resulting in the development of a rigorous explanatory framework (Clark, 2008). In the case of the current study, it can be seen that the main objectives fall very much within the conceptualisation stage. Braun and Clarke (2006) argue, moreover, that methods for the qualitative data analysis typically fall into two main categories: those that are linked to a specific epistemological or theoretical perspective (such as conversation, interpretative phenomenological or discourse analysis) and those that are not tied to any one approach. Thematic analysis falls into the second type and is described by Braun and Clarke (2006) as providing a flexible method that results in detailed and complex accounts of the phenomena under study; as such, it fits well with the critical realist approach and was, therefore, chosen as the analytical method for this study.

Both deductive and inductive strategies are possible within thematic analysis, with the former looking to apply a pre-specified theoretical frame to the data, and the latter taking a more “bottom-up” in which themes are allowed to emerge from the data itself (Braun and Clarke, 2006). Whilst this thesis aims to extend our existing conceptual understanding of the link between social networks and health behaviour change, I have also argued the need for a paradigm shift in our thinking (Chapter 3) and, as a result, I opted here for an inductive approach.

My analytic strategy in this regard was broadly similar to that outlined by Braun and Clarke (2006), although I attended both to the participants’ overall accounts in an attempt to discern their overarching messages and to the closer detail of the interviews in order to identify more finely grained and potentially hidden features of the data. More specifically, starting with the initial four-week interviews, I began by reading through each of the transcripts and my research diary, as well as examining the social network mappings, so as to familiarise myself with the data, before producing detailed summaries for a small number of cases (4), gradually building up a sense of how the accounts were structured and identifying areas of commonality and difference across the participants. From there, focusing my attention on two further cases, I developed an initial coding schema, encompassing nine high-level codes, of which three related specifically to the role of the participants’ social networks in their quit attempts (see Table 4.4). In relation to these three latter codes, which formed the core of my analysis, the schema also contained a corresponding set of sub-codes, up to three levels deep (e.g. managing social networks > avoidance > temptation).

Using this schema as a starting point, I moved over to a detailed coding of the remaining seven participants in the software package NVivo9 (QSR International Pty Ltd., 2010); drawing on the ideas of the constant comparative method (Lewis and Ritchie, 2003), I revised and adapted the schema incrementally, re-positioning and re-labelling the sub-codes as necessary, to better reflect the experiences of each participant in turn. As a last step, I then coded the original six cases, together with the nine follow-up interviews, to the schema as it stood, adding in one high-level code covering issues relating to relapse. Finally, I reviewed and modified the schema again in its entirety, deciding upon three primary high-level themes (which were similar to but not the same as the four main high-level codes with which I started), beneath which sat two layers of more detailed sub-themes (see Figure 4.2 below).

Table 4.4: Initial coding schema

High-level codes	
Contextual factors	Identity Meaning of smoking Meaning of quitting Quit battle Social networks
Networks & quitting	Making sense of network responses Managing social networks Using social network resources Relapse (follow-up only)
Other	(e.g. stop smoking clinics)

Overall, therefore, it can be seen that, through my analytical approach, I sought to ensure the validity of my thematic framework by adopting a step-by-step approach to its construction, considering one case at a time, by looking to the social network mappings to clarify the nature of particular relationships, and by making reference to my research diary in order to reflect my more immediate impressions of the interviews within the chosen codes and themes. Beyond this, Lewis and Ritchie (2003) also point to the value of triangulation in improving validity, outlining a number of possible methods, including the use of multiple analysts to compare and confirm interpretation. Whilst this was not possible within the current study, as it forms the basis of a doctoral thesis, I did discuss my evolving coding schema/thematic framework with my supervisors on a regular basis, thereby giving them the opportunity to test and challenge my conclusions. I have, similarly, presented my findings at a number of national and international conferences, to audiences including stop smoking practitioners and academics alike, as well as covering tobacco control and more general public health communities.

On the related issue of generalisability, Lewis and Ritchie (2003) identify three different forms of generalisation, namely *representational* (to the specific population from which the sample is drawn), *inferential* (to wider populations beyond the one immediately studied), and *theoretical* (to the development and refinement of conceptual models). The relatively small and select nature of the sample in this study, drawn as it is from quitters attending NHS stop smoking services, means that

generalisation at the representational and inferential levels would be inappropriate. As we have seen above, however, the primary goals of the present study are to identify areas in which existing conceptual models are lacking; here, then, even a small number of cases can be sufficient to highlight aspects of behaviour and experience that are not adequately explained by established theories. Moreover, the hierarchical structure of my thematic framework (Figure 4.2) allows a separation of the high-level themes, the wide-ranging nature of which suggests that they may be applicable across a broad spectrum of quitters, from the more detailed themes which are likely to reflect particular instantiations of individual experience.

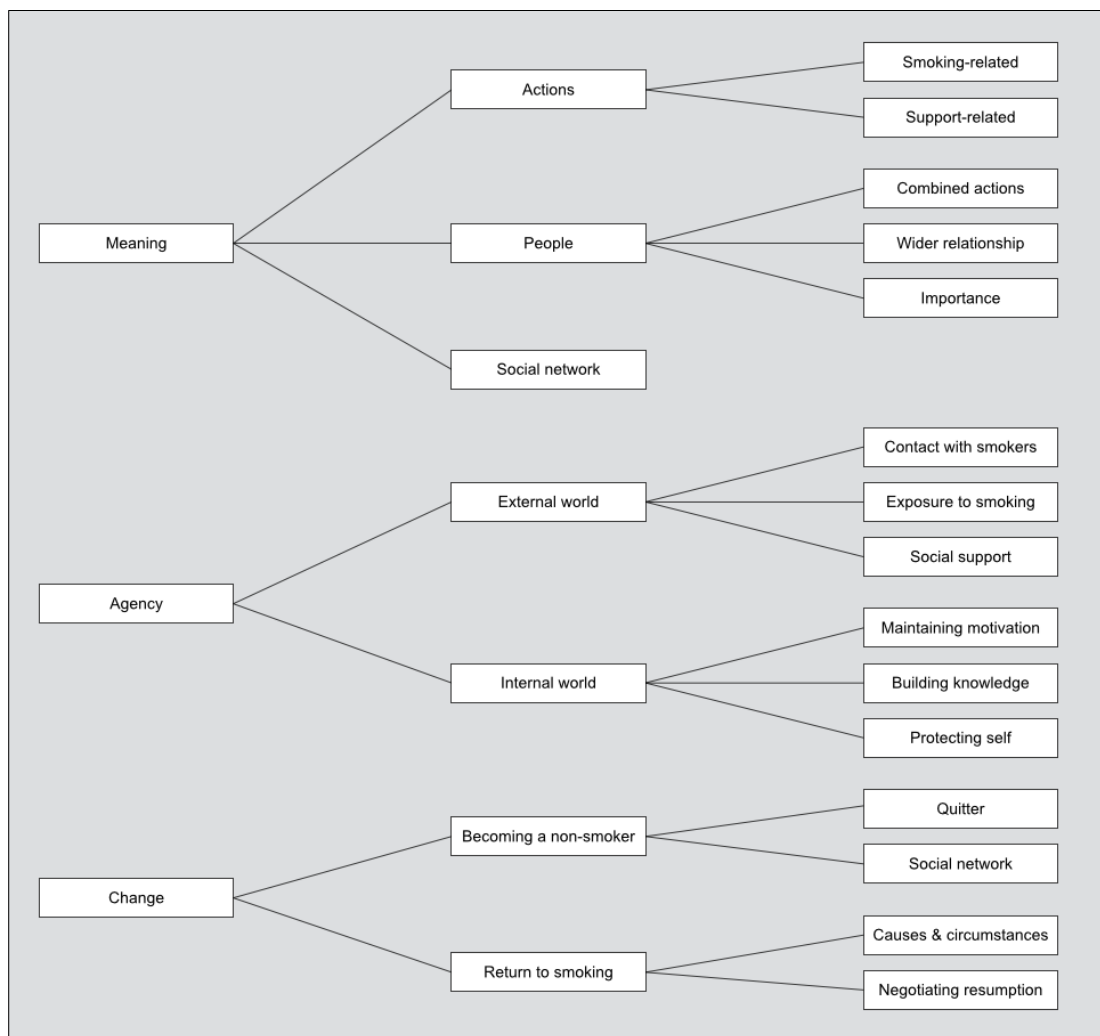


Figure 4.2: Final thematic framework

4.6 Reflexive statement

Central to the critical realist perspective is the belief that social phenomena cannot be measured directly and with absolute precision; knowledge of such phenomena is, instead, seen as being necessarily imperfect and socially embedded since it comes to us through the subjectivity of individual participants and researchers (Snape and Spencer, 2003). As a result, Malterud (2001) points to a general recognition of the necessity for reflexivity in qualitative research. Lewis (2003), for instance, highlights the need to be aware of the power dynamics that come into play within any research interview, stressing the importance of remaining alert to the potential implications of attendant power relations for the topics that participants choose to raise, and for the ways in which they seek to frame these topics. Whilst efforts to create a relaxed and comfortable atmosphere, such as those described above in Section 4.3.1, can go some way to ameliorating these effects, Barbour (2008) points out that power imbalances in favour of the researcher can never be completely eradicated.

Within the current study, there was a definite feeling that the participants were keen, for the first interview at least, to present their homes as a place of orderly calm. This was, however, generally less apparent by the time we met again and I got a much stronger sense of their lives going on around us as we talked, with family and friends dipping in and out of the interviews. For instance, my research diary shows that when I went to see Paula and Alex (a young couple who were quitting together) for the second time, their young daughter opened the door and Paula called me through to the kitchen where she was putting the children's tea on a tray so that they could eat it in the lounge; Alex, moreover, was not yet back from work and, when he did arrive, he briefly interrupted my discussion with Paula as he brought in the shopping. Indeed, this change in dynamic was also apparent within some of their responses: during our initial interview, for example, Paula had made regular references to spending her time searching for work *"Getting up, getting the kids ready and taking them to school. Coming back, maybe going to the gym, having a look for a job"*, but when I saw her again she revealed that she was, in fact, happy to be caring for the children full-time *"Because I have always worked since they were born, so it is nice actually to spend some time with them"*. Thus, there was some suggestion that the participants were being careful to present themselves in a positive light, even if this tendency did diminish across the two interviews. This is, perhaps, particularly salient with respect

to their descriptions of their social network responses to them giving up smoking since critical reports of family and friends were rare.

In a number of cases, however, the participants were seen to try and take some control in shaping the power dynamic between us, with Lynn, for instance, casting me in the role of a much needed confidante *“I was feeling a bit down for whatever reason, I don’t know. And I felt better after you phoned because I thought, a continuation here, they’re interested”*, and Angus explaining that he felt it was important to encourage and support the younger generations *“I am a great believer in encouraging young folk to be all you can.”* As a result, several participants took a much greater lead in directing the interview, and my role became more one of gently nudging them towards specific issues.

Alongside this, Barbour (2008) and Lewis (2003) also emphasise the potential impact of researcher characteristics on the interview dynamic. On the one hand, traits that remind participants of people with whom they have had negative experiences can present barriers to full disclosure; on the other, common traits can encourage transparency but, where the participant and researcher are closely matched in terms of their backgrounds, it can also result in omissions due to an assumed shared knowledge. This has led Barbour (2008) to recommend against attempts to build rapport by establishing areas of commonality. Smoking status appeared, perhaps unsurprisingly, to be of particular relevance in the present study. Angus, for example, was inclined to believe that his advisor at the stop smoking clinic had previously been a smoker because she was so knowledgeable about the issue *“I think she smoked herself at one time then gave up. I’m not sure, I don’t know her background in that way. But just from some of the things that you pick up. About what says, you know, she knows what it’s about.”* Indeed, several participants asked me directly whether I had ever been a smoker. In the face of such an explicit question, I felt that it would be counter-productive to refuse to answer and so, instead, opted to emphasise that I come from a smoking family even though I have never smoked myself. Thus, I sought to find the balance between showing a degree of empathy whilst, at the same time, not implying a full level of understanding.

Beyond the interview itself, the power of the researcher similarly extends to the ways in which the data are analysed and presented (Barbour, 2008), beginning with the choice of theoretical framework. In Section 4.2, I outlined my rationale for adopting a critical realist perspective, pointing to the particular relevance of an emphasis on

complexity and theory development in helping to drive forward our understanding of the relationship between social networks and health behaviour change. It is important to acknowledge, however, that my thinking in this regard has emerged slowly. Prior to embarking on this PhD, I worked as a statistician for nearly 20 years but, having begun to have doubts about the ability of the positivist approach (as I now know it to be) to fully understand issues such as substance misuse, I studied for a degree in psychology and received my first introduction to alternative research paradigms. Intrigued, I wanted to learn more and so began this doctoral thesis, during which time my progress from quantitative to qualitative researcher has been gradual rather than epiphanic. At the outset of the project, my primary aim was to take a broader look at the role of the social network in quitting smoking, shifting the focus away from a predominant focus on the partner, to identify those wider aspects of the network that quitters perceived to be of importance in their attempts to give up smoking. Thus, my approach to qualitative research at this early stage could almost be seen to be positivist, using exploratory interviews to identify discrete components of the network that could subsequently be tested for their association with quit outcomes. In tandem with this, however, I also felt a growing sense of unease; many of my peers eagerly talked of adopting a social constructionist perspective and it often seemed to me that they were doing ‘proper’ qualitative research. The social constructionist emphasis on uncovering the power relations behind everyday constructions of social phenomena (Alvesson and Skoldberg, 2009) did not, though, appear to entirely mesh with my framing of the issues at that point. I, therefore, found myself somewhat marooned, becoming steadily more dissatisfied with an entirely positivist approach but nevertheless unconvinced by social constructionism. Once I began to analyse the first few interviews, however, it immediately became obvious that quitters’ networks were messy and complicated. Participants did not simply attempt to segment their networks into those elements that were helpful and those that were unhelpful, but rather seemed to accept the messiness, looking to work within it. My analysis, thus, became less about identifying those aspects of the network that were important for quitting, and more about shedding light on the inherent complexity, with a view to advancing our conceptual understanding of the issue. When, several months later, I discovered critical realism, the pieces of the puzzle clicked into place and I knew that I had found the theoretical framework for my thesis. For me, then, the way in which I have chosen to analyse and present the findings of this study represents the culmination of a gradual process of reflection and thought in which I have variously

drawn on written texts, academic discussion and the insights of my participants.

The power of the researcher with respect to the analysis does not, however, stop with the choice of theoretical framework. Barbour (2008) additionally points to the tension that may arise between a desire to allow the participants' accounts to stand for themselves and a need to go beyond the merely descriptive to gain a better understanding of the underlying phenomenon, especially in theoretically-orientated studies such as mine. Whilst I have striven throughout this analysis to reflect continually back on the overarching messages of the participants (as I perceive them to be), it cannot be denied that my own interests and background have played a large part in determining the shape of the analysis undertaken, with the original inspiration for this thesis stemming from a personal interest in the role that my family and friends play in my health behaviours. Once again, it is also important to recognise the influence of my professional background; it took a while for me to appreciate and embrace the interpretative aspect of qualitative data analysis and, as a result, my early attempts at analysis bore a strong resemblance to the statistical coding of my past. The hierarchical nature of my thematic framework may, then, be a testament to my positivist background, although I have striven throughout to retain the voices of the participants and to do justice to their rich accounts of their experiences. In the end, therefore, the final analysis represents my attempt to accommodate both the perspectives of the participants and the needs of the study.

4.7 Summary

In summary, this chapter has sought to outline the primary elements of the research methodology used in my own empirical study of the relationship between social networks and smoking cessation. In building upon the literature outlined in Chapter 2 and Chapter 3, this study looked to identify those areas in which current conceptual models might be improved, with a particular focus on how the different components of the social network combine together and on how the quitter and their network members jointly adapt and change, as well as considering the ways in which the existing, somewhat simplistic, measures of the social network might be enhanced. With its emphasis on network complexity (including a recognition that social phenomena can only be known imperfectly) and improved theorisation, the critical

realist perspective was seen to provide an ideal basis from which to approach such a study. In order to address these objectives, I chose to adopt a longitudinal, qualitative design, involving two in-depth interviews with clients of NHS stop smoking services, since this allowed for a separation of the quitters' experiences from their eventual outcomes, whilst also enabling a detailed mapping of their social networks and providing access to their wider personal histories. Overall, 22 interviews were conducted across 13 participants from diverse socio-demographic backgrounds, including a mix of continuing abstainers and relapsers, a sample which I considered sufficient for my purposes of theoretical development. I employed an inductive analytic approach, whereby I both drew on the principles of thematic analysis (Braun and Clarke, 2006) and sought to attend to the overall accounts of the participants, leading to the development of a thematic framework comprising three main analytic themes, together with two layers of more detailed sub-themes. Moreover, I approached this in an iterative fashion, switching between the interview transcripts, the social network mappings and my research diary, as well as holding regular discussions with supervisors as the framework evolved, to help ensure the validity of the findings. I concluded the chapter by reflecting on my role as the researcher and considering how this might have impacted on the results, not only giving thought to the different interview dynamics that emerged but also seeking to make plain how my professional interests and history might have shaped my analysis and interpretation.

CHAPTER 5

Participants' social & smoking worlds

5.1 Introduction

Having provided a rationale for the current study, and given a detailed explanation of the methodology used, I turn at this point to the findings of the study. In the forthcoming chapters, I shall consider the broad strategies that quitters used as they sought to navigate their social networks when attempting to give up smoking. In this first chapter, however, I shall look to build a more general picture of the participants' lives and social worlds, since without this, our understanding of the social interactions that surround quitting will only ever be partial. Whilst necessarily somewhat descriptive, this analysis will nevertheless draw on a number of concepts from the social network studies in health perspective (see Chapter 2). Moreover, the analysis will be structured around two main themes, namely understanding the participants' social worlds and understanding their smoking worlds. I shall begin in *Understanding their social worlds* (Section 5.2), by seeking to characterise participants according to their family network, their friendship network, and their life stage patterns, drawing in particular on the social networks literature on family structures. I shall then move on, in the second half of the chapter in *Understanding their smoking worlds* (Section 5.3), to examine the participants' smoking and quitting histories, their typical smoking routines, paying particular attention to *time, place and people*, and the meanings that

they attach to smoking, before concluding by exploring the patterning of smoking and quitting amongst their social networks.

5.2 Understanding their social worlds

The three following chapters will explore the ways in which participants sought to navigate the social interactions surrounding their quit attempts, with each chapter adopting a different, but inter-related, focus, namely meaning, agency and change. It is clear that many aspects of the social network may be relevant to such analyses, including, for example, the social roles assumed by people in the network, the participants' perceptions regarding the nature of important relationships, as well as their beliefs about social network attitudes to smoking and quitting, which will in turn be connected to the smoking backgrounds of individual network members. Taken together, these various elements will not only collectively shape how the quitter understands the responses of their social network, but will also underpin the ways in which quitters decide to navigate their networks, both in terms of dictating what is necessary and what is possible. Before we can proceed to the main analysis, therefore, it is first important to gain an understanding of the social networks in which the participants are embedded.

In Chapter 2, I suggested that devising a single, unified definition of family is neither trivial nor straightforward. Indeed, Bernades (2008) posits that such a pursuit is not even desirable, instead arguing that we should focus on uncovering what different discourses around the family seek to achieve. Defining friendship was seen to be equally problematic, with most authors focusing on the narrower issue of capturing social support networks. The aim of this section is not, however, to add to the debate on the nature of family and friendship, but rather to build up a picture of how the participants perceive and understand their social worlds. With this in mind, in Chapter 4, I argued for the importance of a method that encouraged participants to talk about their family and friends in a manner that made sense to them, without imposing a rigid structure on the way they constructed their networks. I did this partly through asking open questions that explored the patterns of their everyday lives, paying particular attention to the nature of their interactions with other people, and partly through a more formal mapping exercise that focused on certain key

relationship categories, such as family, friends, and work colleagues (the full set of social network mappings can be found in Appendix C). The more structured nature of this latter exercise meant that participants were typically more, rather than less, inclusive and consequently identified people who are perhaps more peripheral to their network. I shall next, therefore, seek to undertake a combined analysis of the data from these two approaches to build up a picture of participants' core social networks, looking to highlight areas of commonality and difference in the patterning of their social networks.

5.2.1 Family network patterns

Thus, beginning with the participants' family networks, I identified four main groupings (Figure 5.1) which centred primarily on the notions of nuclear and extended families, as discussed in Section 2.2.1.

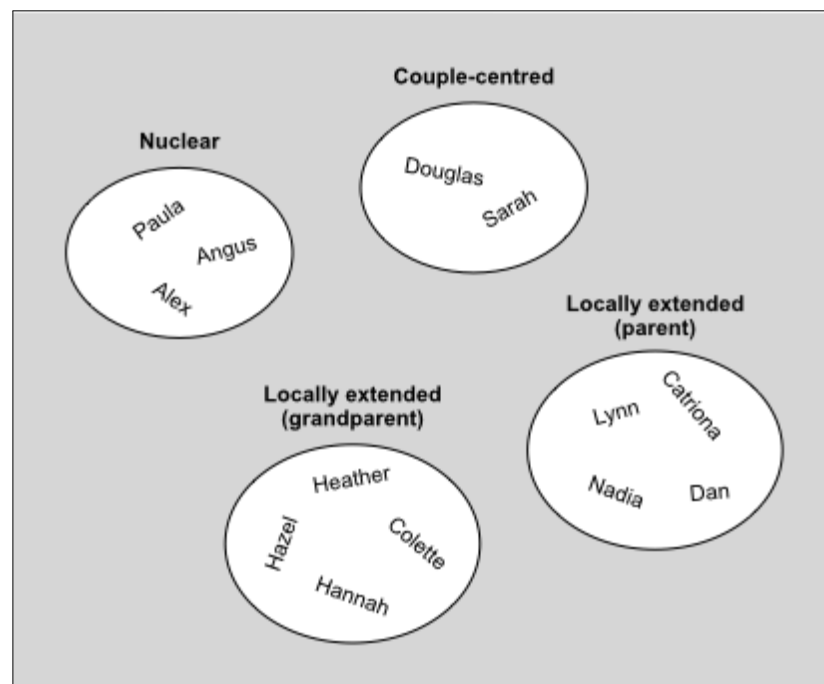


Figure 5.1: Group membership for family network structure

Although the traditional *nuclear family* concept did not apply exactly to any of the participants, Paula and Alex did nevertheless appear to conceive of their core social networks in this manner. My impressions were that they seemed to be a close knit family unit whose lives revolved around each other. Alex supported them financially

by working as a school caretaker, a job he considers to be “*quite boring*”, while Paula looked after the children full-time. They described themselves as being busy, and having limited time to spend with their wider families and friends; the one exception to this was Alex’s mum, who lived nearby and visited regularly, helping out with the children and other chores.

Alex: Fine. As I say, it’s really my mum I see the most anyway, and work and the kids. All of my brothers are older than that anyway. My mum just says it’s been good. Obviously they will be chuffed at no smoking anyway, because none of them smoked really anyway. Mostly as I say, mostly just my mum that would say “You’s are doing well,” like the both of us, as she comes in. Because my wee brothers and my older brothers I don’t really see that often anyway.

Perhaps more unusually, Angus appeared to continue thinking of himself as belonging to a nuclear family, even though his grown-up children now have families of their own. He repeatedly cast himself as a family man who shared a close bond with his wife, and who continued to prioritise the needs of his children, a picture that was reflected in his family-centric social network mapping (Figure 5.2).

Angus: I am very much a family man. I like to know what my kids are up to, my grandkids are doing and stuff like that.

Caroline: So you get to see them a lot, do you?

Angus: In fact they’re... the other night there, my youngest son, he phones me up, I haven’t seen him for weeks. My wife is dyslexic and so is he. Amanda has it as well, it kind of went down the line. He phones me up “Dad, I’ve broke down, can you come and get me?” Jacket on, away, you know, so that’s the kind.

Douglas, on the other hand, was much more difficult to classify. During the course of the mapping exercise, he identified numerous family members (12) from his own generation. On closer probing, however, it became apparent that he was rarely, if ever,

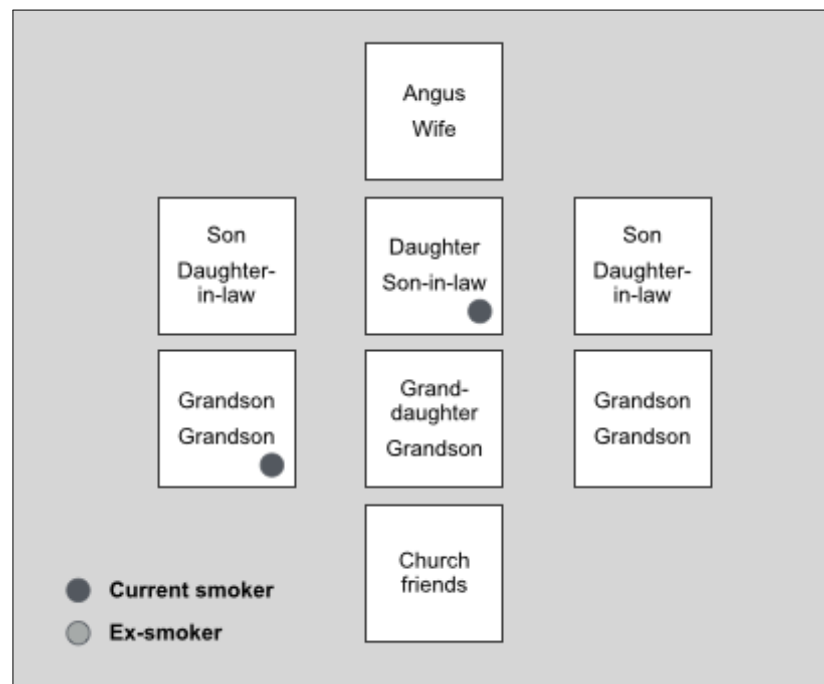


Figure 5.2: Angus's social network mapping

in contact with his wider family “*I hardly see my sister sadly. She’s only about 12 miles away.*” Instead, his life seemed to focus around his wife, with occasional visits to his adult daughter, who lived in northern England. Thus, whilst he attempted to paint a picture of belonging to a wide extended family, his day-to-day experience appeared to be somewhat different. Sarah, in contrast, described a more dispersed network, in which she was close to both her sister, who was based in southern England, and her cousin, who lived in the north of Scotland, but had less frequent contact with two other family members, her step-daughter who was away at University and a second cousin who lived abroad. Her main social interactions though, like Douglas, revolved around her second husband and I have, therefore, decided, to adopt the label of a *couple-centred family* for these two participants.

Sarah: Two sisters going away for the first time together on their own. I’ve never done... because it were done... mum was always in the way before. You couldn’t do anything with your sister without your mum so.

Caroline: It sounds very brave to me.

Sarah: We get on like a house on fire.

And then later in the interview:

Sarah: So you know, when you ask what I would do socially, I would sit in the evening and talk with Graeme and be totally entertained.

The majority of participants can, however, be characterised according to the *extended family model*. I have divided this model into two main sub-types, according to whether the quitter was the parent or the grandparent. Falling under the former grouping were Lynn, Nadia and Catriona, all of whom had structurally similar networks that extended both lineally, over multiple generations, and co-laterally, across the same generation, to variously include family members from three generations: parents, parents-in-law, aunts and uncles, sisters, as well as spouses and children. The main difference between them lay in the age of their children; whereas Lynn and Catriona's children were young adults, Nadia's were considerably younger and were in nursery school. Moreover, while Lynn's children still resided at home, the eldest of Catriona's daughters had her own place nearby. Further differences included the age and failing health of Lynn's parents and parents-in-law which meant that she had begun to assume caring responsibilities for them.

Lynn: I just feel that we've had spate of bad luck with them being not well. You know, my mother-in-law and my father-in-law and then he's back in again and he's only fortnight out and that's him back and you're running up and down to the hospital and it's...

Caroline: It's tiring.

Lynn: An hour and a half visiting in an evening. By the time you get home and I get her back and make her some supper and get her organised. Because she has carers in, you see, four times a day. So I think at tea time when they leave she tells them not to come back because she's doing an evening visit because she's not going to be there.

The smallest of the parent-centred extended networks belonged to Dan. He was divorced and lived alone although his current partner, Colette (a fellow study

participant), lived nearby in the next town. The remainder of his lineally extended family was based in the Strathclyde area and included his two sons (one a teenager and the other in his early twenties) from his previous marriage, together with his parents to whom he appeared particularly close.

Dan: I've only really got my mother and my sister, I've only got one sibling, my sister. That was the first time I had seen her in about a year or two as well. It was good to catch up.

Caroline: So is that as well, now you are in Stirling, you see less of them?

Dan: I never really saw my sister, me and my sister, it's not that we don't get on, we've got separate lives. That was it. It was just the way it is.

And then later in the interview:

Dan: That's who I'm closest to, my mother and father, obviously.

A further four participants, all of whom were females in their late forties or early fifties, belonged to extended (again lineally and co-laterally) family networks in which they were the grandparent. These networks contained either three (Heather) or four generations (Colette, Hannah and Hazel), encompassing parents, spouses and partners, siblings, nephews and nieces, in addition to their children's own families. In the main, I got the impression that these networks were generally tight knit, with all members living in close proximity and seeing each other on a regular basis. The one exception to this was Hazel, who had recently become estranged from both her two children, meaning that she was now only able to see her grandchildren when they visited without their mother's permission, putting an even greater strain on her relationship with her daughter. She had compensated for this by taking an increased role in looking after her brother's and sister's children. Moreover, like Lynn above, Hazel visited her parents on a daily basis to help with the household chores now that her mother's health was becoming poor.

Hazel: So, and I'm really shocked because she came to my door the other day there, my daughter, and my

granddaughter had done a runner from the school. She'd been rowing with her mum and took off and she looked like she was heading here. And I said "She wasn't heading here" and I says "but come in and look, Nora". "I have to get the police." I says "Please don't send the police to my door, I'd rather you came into the house, let's talk about this. Because obviously", I says "if she comes here, I will contact you".

And then later in the interview:

Hazel: I need to have a break from my mum because I sort of go up there every day. Love her to death but it gets... it's hard work. It is hard work and I'm... I don't keep well myself so it's nice sometimes just to go and get a few days that you can chill out.

5.2.2 Friendship network patterns

The ambiguity of the concept *friend* was very much in evidence during the interviews, with participants both seeking clarification as to what I meant, and prefacing their responses with an explanation of their understanding of the term. For example, Nadia asked "*Just like my closest pals that I see like every week?*", whereas Sarah began by reflecting "*I think this is actually quite interesting because to me your friends are the people you're interacting with on a fairly regular basis*". While these two definitions are on the face of it fairly similar, they also imply subtle differences in the frequency and mode of contact associated with friendship. Moreover, the question appeared to be problematic, and even uncomfortable, for some participants since they did not see themselves as having any friends. Hannah, for instance, initially stated "*I don't really have any friends, I don't*" but as we talked further she did identify people who might be seen as fulfilling a friendship function, classifying them instead as work colleagues, supporting the idea that the term friend may be understood as encompassing those individuals who do not fit within another relationship category (Fischer, 1982).

Hannah: I don't think I have any friends as such, apart from work colleagues but I don't go about them. I just see them at work.

Caroline: Yeah. So, would you say... I mean do you talk to them sort of about more than just work?

Hannah: Yes, aye. There's a couple that, you know, I confide in and they confide in me, so...

In mapping out their friendship networks, nearly half of the participants identified family members as being friends. Some did this explicitly; Catriona, for example, pointed to the sticky for one of her sisters, saying "*She's my friend*". This was not, however, always the case and other participants merely implied an overlap between the two roles, describing their relationship with a family member in such a way as to suggest friendship.

Angus: We don't go socialising a lot. Very much into our own wee circle, Margaret [his wife] and I. Aye, we go to the shop and we go out for lunches and stuff like that. Aye. Got a wide circle of friends that we know, that we'll sort of see when we pass, we stop and blether and stuff like that.

It's funny, we were just talking about that the other night there, about our social life, it's very much her and I, you know?

Focusing on friendships outside of the family, these fell into two distinct types: those friends with whom interactions occurred only in the work environment (as in Hannah's quote above), and more general friendships that were no longer limited to particular activities or places. These latter relationships were seen, in the fashion described by Kirke (1996), as having been formed across a whole range of contexts, including friends who had initially started out as work colleagues and friends who were first encountered within a specific social setting; Hazel, for example, mentioned meeting her friend Kirstie at a local healthy eating group "*To let you understand, I've got a friend... a girl I befriended a while ago at a group that I used to attend*". There were also hints that a third, intermediate type of friendship group existed that included individuals who continued to be seen within a single social context, such as a local

football team or at church. As the participants chose, however, not to identify these people as friends, instead seeming to view them more as acquaintances, I opted to omit this possible grouping from the current analysis.

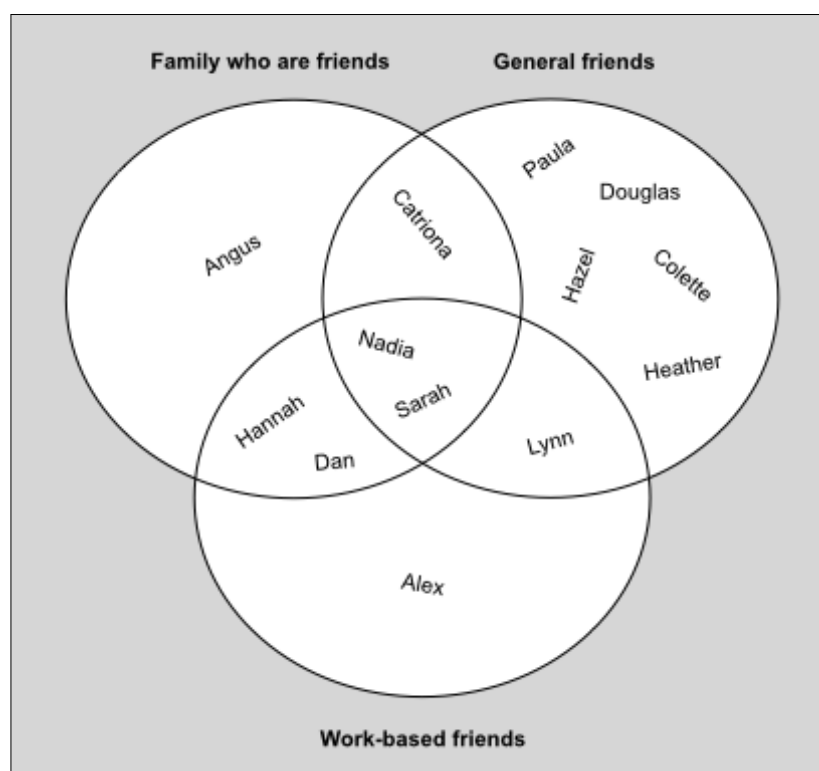


Figure 5.3: Group membership for friend network structure

Taking these three friendship types (family who are friends, general friends and work-based friends) together, there was considerable variation in the patterning across individuals (Figure 5.3). Five participants referred only to general friendships, with the number of friends ranging from two (Colette) up to seven (Heather). Moreover, Alex mentioned having a single work-based friend, a relationship that he appeared to characterise as being that of a 'workmate', whereas Angus's sole friend was his wife, Margaret (see above).

Hannah and Dan, in contrast, described friendship networks that contained one family member (a sister and partner, respectively), in conjunction with three friends from their workplace; Catriona outlined a broadly similar friendship pattern although, in her case, she classified each of her five friends under the 'general friendship' category. The largest (nine to thirteen members) and most complex friendship networks were seen, however, amongst those who identified a combination of general

and work-based friends. For Lynn, there was a clear split between these two friendship types (Figure 5.4), whereas for Nadia and Sarah the distinction was more graded. They both identified friends who had no connections to work, friends who they had originally met through work (in some cases they continued to work with these friends but also saw them in other social contexts), and friends with whom their relationship was limited to the work environment. Furthermore, these latter two participants also identified a small number of family members as being friends with whom they socialised.

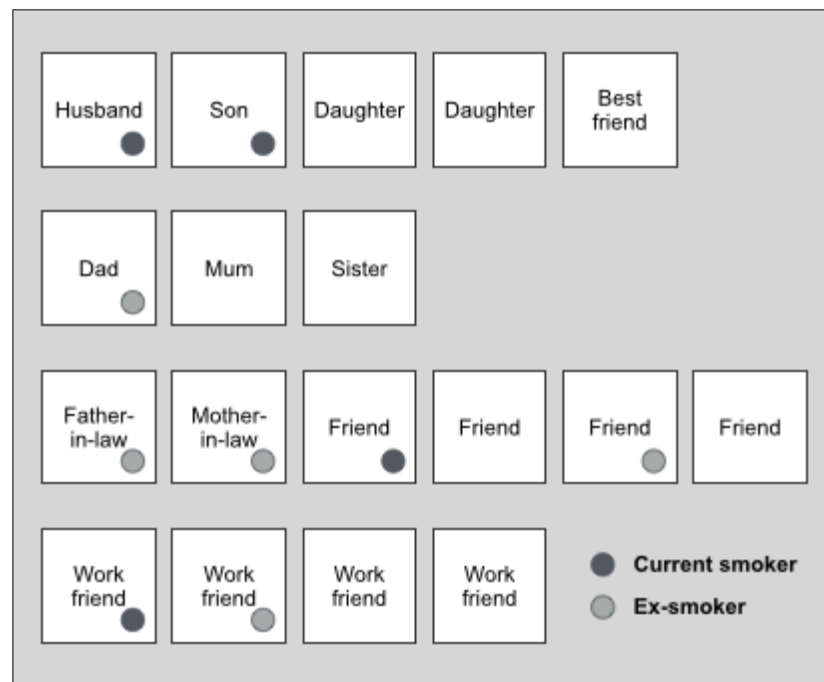


Figure 5.4: Lynn's social network mapping

Whilst useful in a small study such as this, a broad classification into family-, general- and work-based friends does, nevertheless, overlook some of the more nuanced dimensions of friendship. In Lynn's case, for example, it draws no distinction between her best friend who she sees on an almost daily basis "*Well, Lindsay is the main one I see all the time, my friend*", and her other four general friends who she meets up with occasionally at the local club "*When we go out socially, we normally go up to the wee club at the top of the road, when you go down a wee bit. We sit and see people there as well.*" It also fails to differentiate between those social network members who live in close proximity and those who are more dispersed, despite the impact that such a difference in location is likely to have on the nature, frequency and mode of any

interactions. Sarah, for instance, had lived in many places over the course of her life and, accordingly, identified friends from across the United Kingdom, as well as from Europe more broadly. She, therefore, looked to more indirect methods of communication, such as using the telephone, email, or social media, to keep in touch with these more distal network members. Moreover, physical distance was not the only barrier to face-to-face interaction; even though Paula's friends still lived relatively close to her, she found that they only infrequently met up in person now that they all had young families and so, instead, they often communicated via Facebook.

Paula: Like, with my friends and that, we don't get to see each other all the time. We are on Facebook or we are talking on the phone or that, because we have all got our own kids. So we are busy with that. So we can't just say "Let's go and meet up."

Thus far in this section, I have primarily focused on those people that the participants decided to include in their social network mappings. A number of interviewees did, however, also make reference to friendships that now appear to have lapsed, with various reasons being given for this. Hazel and Dan, for example, both described having lost contact with friends as a result of moving to a new area although, in Hazel's case, she was now attempting to rebuild her friendship network "*So as I say, I've only actually built up maybe Gwen and that recently*". In contrast, Douglas cited his financial difficulties as the main reason for his lapsed friendships, with chronic health problems meaning that he had to take early retirement, leaving him with little money, and forcing him to spend much of his time at home "*I'm never actually out in the day because I'm stuck in the house.*" Beyond these more practical constraints on maintaining friendships, Kalmijn (2003) also refers to the process of *dyadic withdrawal*, in which the friendship networks of couples tend to become smaller and more similar once they move in together or get married. This would appear to apply to Alex, in particular, who described how he no longer sees his friends since meeting Paula and having children.

Caroline: OK. And so a similar thing, but this time for friends.

Alex: Friends?

Caroline: Yes.

Alex: Well, see that's what happens, I've not got, well, I have got friends though but... once I started being with Paula and having kids and things that...

5.2.3 Life stage patterns

Alongside these (largely) structural depictions of the quitters' social networks, it also became apparent that the ways in which the participants experienced their social worlds were, at least in part, shaped by their life stage. Here, various approaches have been taken to the identification and definition of the different life stages, with some focusing on age-based classifications (Martinson et al., 2011), some on social roles (McMunn et al., 2006), and others still on role transitions (Kalmijn, 2003). Rather than looking to adopt a pre-defined classification, I have instead drawn on the principles of the latter role-based approaches to develop empirically a set of life stages that better reflect the circumstances of the participants in the current study (Figure 5.5).

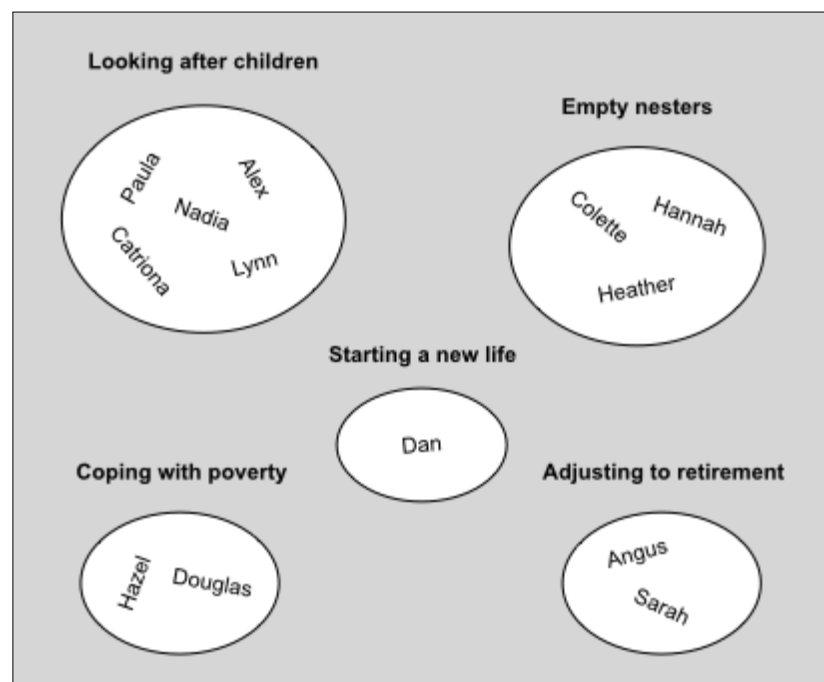


Figure 5.5: Group membership for life stage

The first, and largest, of these stages *looking after children* included a total of five participants. Paula and Alex were a couple with two young children of primary

school age; Nadia similarly had two children but hers were slightly younger and were in nursery. Both Paula and Nadia were the main carers for their children, whilst their partners were the main wage earners. There were, though, distinct differences in the reasons for these care arrangements. Nadia's husband worked away on a four-week on-off rotation, meaning that she was responsible for looking after the children on her own for much of the time. She did, however, work part-time for the local council to keep some variety in her days *"I quite like getting a balance between being in the house and being at work"*. Her mother, Heather, cared for the children on the days she was at work. In contrast, Paula was not working at the time of the interviews (having been made redundant 12 months previously) and she was, therefore, taking the opportunity to spend some time with her children, and was enjoying looking after them full-time *"Because I have always worked since they were born, so it is nice actually to spend some time with them"*. For Paula and Alex, caring for their children was very much at the centre of their lives.

Paula: A typical day? Getting up, getting the kids ready and taking them to school. Coming back, maybe going to the gym, having a look for a job. Pick the kids up, feed them and then get them ready for bed.

And then in his interview:

Alex: Just try to spend time with the family at weekends.

While Catriona and Lynn also fell under the *looking after children* grouping, their situation was somewhat different as their children were much older (in their late teens and early twenties). In Catriona's case, only one of her two daughters still lived at home (although the other continued to live locally); she gave the impression, however, that she had already begun to make the transition to being an empty-nester (see below) *"But as they're getting grown up now, Sam and I, my husband, just spend time together at the weekend"*. Lynn's three children, on the other hand, all remained living at home and, despite the fact that they were now working themselves, she still cast herself in the role of looking after them.

Lynn: I had been preparing the dinner, I always make a big thing on a Sunday. I think because I'm working all week and it's a bit slap dash through the week. I always make a big dinner on the Sunday. Well,

sometimes I wonder why I bother because they come in and out here like it's a bloody hotel. But anyway, and I'd been ironing and I was feeling pretty...

Next are the *empty nesters*, or those participants whose children have left home. This group contained three females all in their forties and fifties. Hannah and Colette were both divorced when their children were younger and took on the main childcare responsibilities; Hannah had since moved back in with her parents, while Colette continued to live alone. Heather, in contrast, had been married for many years, and described herself at the first interview as being "*a lady of leisure*" although, by the second time I saw her, she had taken a part-time job "*to get me out of the house*". In all three cases, their children continued to live nearby and they saw them on a regular basis. Furthermore, both Colette and Heather had a set arrangement whereby they looked after their grandchildren on two or three days a week.

Caroline: So you just look after them do you?

Colette: Yes, on a Thursday. I take the day off on a Friday so I can be with them until it's time for nursery for Tara and then they all go home on a Friday.

Caroline: Right, so you take them in the evening. Have them for the evening and the rest of the Friday.

Colette: I keep them overnight on Thursday, and then take back at teatime on Friday. It kills me.

Rather than focusing on the social role of parenting, the remaining three categories relate instead to transitions after a significant life event. While Dan had many similarities with the empty-nesters group (having two sons aged between 15 and 25 with whom he no longer lives), this seemed to have been as a result of his divorce rather than them leaving home. He met Colette a few years ago and moved to the Forth Valley area to be nearer her and he, therefore, appeared to fit more appropriately under the category *starting a new life*. Moreover, this move had led to him losing contact with much of his social network as they were based in the west of Scotland.

Caroline: So you don't see you friends in Paisley anymore?

Dan: Aye. Very few and far between. I'm not through there a lot. If I do, I am working through there. You tend

not to want to go back through there travelling again. It's like a busman's holiday, you would be doing it every day.

And then later in his interview:

Dan: As I say, I don't really know anyone here. I've got acquaintances, I can go into pubs and I know several people that I can stand and chat to. I wouldn't exactly call them a friend, more an acquaintance.

Chronic health problems were the cause of major life changes for both Douglas and Hazel, who found themselves *coping with poverty* after having to give up work. In Douglas's case, he had to take early retirement from his job as a mechanical fitter when he was in his mid-thirties, and his financial situation appeared to have become even worse since reaching the official retirement age, restricting what he was able to do still further "*I don't bother going to the pub because it's too expensive and I just don't have the money to do things. So it's a pretty miserable life actually*". Until recently, Hazel had been in receipt of incapacity benefit but, under changes to the benefits system, she had been reclassified into the work-related activity group and had her benefits cut, leaving her trying to manage on her new reduced budget.

Hazel: I just took a big hit. I'm one of these unfortunates that got her benefits cut and I'm having to fight to try and get them reinstated.

And then in the follow-up interview:

Hazel: So but then I lost £400 a month in benefits, so I could no longer save that £300 and I couldn't afford... So it's now I can maybe save, I reckon in between about £60 and if I tighten my belt like at the supermarket and don't buy so much at the supermarket, which I don't really need to do. And shop in shops like Aldi's and Lidl's where you get just as good food but it's a bit cheaper than here. I could save... I can save £60 definitely, but if I cut down £20 each week on my shopping bills, I could probably save £100 a month. Which again is going to give me enough money to go

on holiday, if the washing machine breaks down, the telly breaks.

For the final two participants, their life stage reflected that they were *adjusting to retirement*; they were, however, each at very different stages in the process of transition. Sarah was in her early sixties and was still working, but the casual nature of her job meant that she could decide how much work she wanted to take on at any particular time. She had, though, begun to think about what she needed to do to prepare for retirement, reflecting for example that “*we’ve both got to start developing a social network locally*”. Angus, on the other hand, stopped work a couple of years ago and, after a period of struggling, he had now begun think more positively.

Angus: You know, it’s time to look at a whole new life. I took it bad when I retired. First couple of months it was, oh, it was hard, yes. You’re constantly on the move and stuff like that and then suddenly you were, you didn’t have to move.

Caroline: Yes.

Angus: That was hard. It got quite heavy then and it was just after that that I thought “No, this is not what it’s about.” You know? That’s where I’m at just now.

5.3 Understanding their smoking worlds

5.3.1 Smoking & quitting histories

My attention now turns to building a picture of the participants’ smoking worlds before they attempted to quit, beginning with an outline of their smoking and quitting histories, highlighting in particular those factors that have been shown to be associated with short and long-term quit outcomes (Judge et al., 2005; Ferguson et al., 2005), namely daily cigarette consumption, the interval between waking and having a first cigarette, and a history of recent quit attempts. There was considerable variation in the number of cigarettes smoked (Table 5.1), with Angus smoking the least, at under ten per day. He used to smoke more (10–20) but had to cut back when he

retired, both because of the reduction in his income and because his wife could now see how much he was smoking. Colette and Catriona were the heaviest smokers, with a typical daily consumption of more than 30 cigarettes. There were similar differences in the interval between waking and having their first cigarette; five participants, for example, smoked almost immediately. Most of the others would get up and dressed, and in some cases have their breakfast, before smoking, meaning that there was a gap of up to an hour before their first cigarette. Douglas was somewhat unusual in his smoking pattern since, remembering the advice of his parents, he would wait for a couple of hours after breakfast *“Well, my mum and dad were smokers, you know, and I always remember him saying you should always have something to eat first”*. As expected, the interval between waking and smoking was generally shorter for those participants who smoked the most.

Table 5.1: Behavioural characteristics of participants

Pseudonym	Daily Cigarettes	Waking to first cigarette (mins)	Quit attempt in last 12 months	Smoking at 4 weeks	Smoking at 13 weeks
Angus	<= 10	6–30	N	Y	Y
Lynn	11–20	6–30	N	N	N
Hannah	11–20	31–60	N	N	n/a
Heather	11–20	31–60	Y	N	Y
Douglas	11–20	> 60	N	N	n/a
Alex	11–20	n/a	N	N	N
Sarah	21–30	<= 5	N	N	Y
Dan	21–30	<= 5	N	N	n/a
Hazel	21–30	<= 5	Y	N	N
Nadia	21–30	6–30	Y	N	Y
Paula	21–30	n/a	Y	N	N
Colette	31–40	<= 5	N	N	N
Catriona	31–40	<= 5	N	N	n/a

Four participants mentioned having made a quit attempt within the last 12 months. While Paula's bid was short-lived *“it didn't work out”*, a joint attempt by Nadia and her mother, Heather (a fellow study participant), lasted for four to five months, with Nadia going back to smoking first following an argument with her mother, and Heather then relapsing a few weeks later after her husband had a bad accident. The longest attempt, though, was made by Hazel, who had given up the previous Christmas when her son gave her an e-cigarette. She lasted slightly over six months but started smoking again when she had a major falling out with her daughter, which resulted in her no longer being able to see her grandchildren.

In relation to their current attempt, all but one of the participants remained quit by the time of the initial four-week interview. Angus had never managed to completely stop; whilst he had cut back, he was finding it difficult to eliminate the final two cigarettes, and continued to smoke at the beginning and end of the day. He did, though, repeatedly mention being determined to stop *"Yes... I am going to get there. Quite, I'm getting my gander up and get things going again"*. The situation at the follow-up interview was, however, somewhat different. Of the nine participants who agreed to meet me again, three had returned to smoking. Moreover, Angus had still not managed to quit entirely and was, instead, now smoking nearer to ten a day. Hazel had lapsed briefly, after another major argument with her daughter, but had quit again almost immediately.

5.3.2 Smoking routines

Next, looking more broadly at the routines that had shaped their smoking habits, the majority of participants focused on the dimension of *time*, providing detailed chronologies of the occasions on which they smoked. Overall, a broadly consistent pattern emerged in which participants typically had their first cigarette soon after waking, and then continued to smoke throughout the rest of the day, only stopping when they went to bed at night.

Hazel: Oh first thing when I used to get out of the bed in the morning, put the kettle on, made a coffee, parked my bum and that was it. There was no ... I never even thought about waiting an hour or whatever. And that was it till I went to bed at night.

Within this, however, levels of smoking were seen to ebb and flow across the course of the day, with perhaps the most obvious delimiter being the need to fit smoking in and around their working lives. This first manifested itself in a compunction to smoke more heavily in the period immediately before starting work. Catriona, for instance, seemed anxious about having to last until she was next in position to have a cigarette *"And I'd have another one when I got in the car, driving to work. Sometimes two, because I panicked then knowing that I would not be able to have another one"*, whereas Lynn was determined that nothing would get in the way of her early morning cigarette quota.

Lynn: I had three cigarettes before I went into work and I was only up for an hour and a bit. You know, if any time I skipped the one I felt really cheated and normally would park my car and go and stand outside the gate and have one before I went in. Suppose I was five minutes late, I would do that. I had to have this three before I went into work.

Once at work, those participants with office-based jobs (Nadia and Lynn) were required to limit their smoking to set breaks in the morning, afternoon, and at lunchtime. Hannah, Colette and Catriona, on the other hand, had client-based jobs which enabled them to smoke on the journeys between customers; Colette, for example, would generally aim to have a couple of cigarettes when travelling from one appointment to the next *"The minute I got out to the car I'd have a fag. And then maybe by the time I got to the next house I'd have one just before I went in."* A number of other participants (Alex and Dan), in contrast, primarily worked outside and were, therefore, able to exert greater freedom over when they smoked. Moreover, Sarah's job as a university teaching fellow meant that she had sufficient seniority to exercise control over the frequency and timing of breaks, sometimes leaving her students to work by themselves when she went out to smoke *"I would sometimes during the day nip out the back and have another one. The students were well aware. I would just say 'Right, you carry on, I'll be back in 5 minutes,' sort of thing."*

The end of the working day then appeared to provide a signal to participants that they could now smoke as they pleased. Thus, in the reverse of her early morning routine, Catriona had a cigarette in the car on her way home and then a second as soon as she arrived back *"Finish work, again in the car coming home. And then when I arrived home, having a coffee and a cigarette and then..."* From there, the participants' smoking routines became much less regimented and most took this as an opportunity to smoke all evening. Colette, for instance, described spending hours on her laptop smoking cigarette after cigarette *"I'd sit and smoke loads on the laptop, Facebook or whatever and that's what it was really. You would just light a fag up."* Interestingly, this more unconstrained pattern of smoking was apparent across the entire day for the five participants (Paula, Douglas, Heather, Angus and Hazel) who did not work. Indeed, there was no evidence that these participants associated smoking with particular times of the day, although some did instead appear to link having a cigarette

with rest and relaxation; Douglas, for example, would smoke whilst reading the paper *"Well, no I can't say, I wouldn't say I was actually gasping I would just be like having a read at the paper and have a fag"*, whilst Hazel would enjoy having a cigarette with a cup of coffee *"I've always liked to sit down and have a cigarette and a coffee."*

Beyond these descriptions of the 'when' of smoking, participants also talked about the *places* that they particularly associated with having a cigarette. Whilst the one such place common to all participants was the home, some imposed more restrictions than others on the precise locations where they permitted themselves to smoke. Paula¹, Hannah, Heather and Angus were perhaps the most stringent, only smoking outside at the back, in order to avoid letting the smell of cigarette smoke into the house, as Hannah explained *"I'd always sat outside cause I hate the smell which is silly when you think about it."* Several other participants (Lynn, Douglas, Hazel, Nadia and Catriona) attempted, instead, to mitigate any negative effects by containing their smoking within a single room; Hazel, for instance, had got into the habit of smoking in the living room, with the door shut and the windows open, when her son was a child *"My son's asthmatic so even when I was a smoker, his room was up the stairs and I always kept the living room windows open, even at night, even in the winter and I kept the living room door shut. So I only smoked in the living room. I never smoked anywhere else in the house."* The remaining participants (Alex¹, Colette, Dan and Sarah), in contrast, did not appear to have a designated smoking area and would usually smoke anywhere in the house, apart from possibly in the direct presence of children.

Colette: But once I picked them [her grandchildren] up, as I said, I don't smoke in here but I'd go out to the kitchen. But you'd never have as many fags with them because you had to be here with them. They were needed fed, changed, whatever, bathed, bedded. And then it's like when you sat down after all that, it would be like, oh God, get a fag! I used to think "please help God I need a fag, I need my fag" but I would go out to the kitchen and if I was making up a bottle or

¹Although Paula and Alex lived together, they gave contradictory accounts of the rules regarding smoking in their household.

whatever I would have a quick puff in the kitchen, just as soon as I could. I would run upstairs and sit in the toilet and have a fag. "Play with your toys so I can I go for fag." I'd run their bath just to have a fag.

Outwith the home, participants gave minimal details about where they smoked, largely limiting their accounts to saying that they went outside to have a cigarette, whether this be at work, like Lynn "*They didn't give us a smoking zone within the hospital. They made you go outside, now patients could smoke at the door...*", or at other people's houses, like Douglas when he went to stay with his daughter "*It's quite a small house and obviously you need to go outside and shut the door.*" The main exception to this, however, was the car; several participants, such as Sarah, saw the car as providing a safe haven where they were able to smoke away from the critical eye of other people "*I'm in my own little space and no one's going to shout at me if I have a cigarette, open the window.*"

By way of contrast to these descriptions of time and place, participants were much less likely to characterise their own smoking activity with reference to other *people*. Indeed, several participants (Paula, Angus and Douglas), depicted smoking as something that they largely did alone; Angus, for instance, considered smoking to be a solitary pastime "*Just something I do on my own*", one that caused him some considerable embarrassment "*But there is one or two that I know that do smoke, but I never sort of congregate with them outside the Church or anything like that. I see it as a bad image to...*" Whilst the remaining participants were more likely to report having a cigarette with other smokers, this appeared to be incidental rather than deliberate, as we can see from Alex who seemed to suggest that his partner, Paula, was his primary smoking companion almost by default "*Obviously we would see each other every day, so it's... would be the main person, yes..*" Moreover, when prompted to name the individuals with whom they had normally smoked, these participants typically proceeded to list all the smokers within their networks.

Nadia: My mum, my sister. Scott, well my dad, but he's been stopped for ages and ages. Scott, my Auntie Grace, Laura, Linda and Jean. So yes, everybody that used to smoke because I smoked with them. Her at work, Laura used to work with us, I used to smoke with her at work. Linda as well and then, like, my family.

On the relatively few occasions when participants did give more in-depth examples of sharing a cigarette with other people, there was generally a sense that they were attempting to explain the wider context of their relationships, rather than seeking to convey the social nature of smoking. Most usually, these accounts focused on situations which demonstrated the strength of the bonds with their network members. Thus, Sarah mentioned how she and her husband, Graeme, would sit and talk in the evenings, with a cigarette *"So we would just sit and chat, socialise with cigs and booze basically probably, at the weekend."* There were, in contrast, perhaps only two examples in which smoking was portrayed as being an integral part of a relationship: Lynn, for instance, described how her friendship with her main smoking buddy at work, Freda, had its roots in a time when they had been a part of a much larger group of smokers.

Lynn: In my smoking days, in my heyday there, there was a group of us that went out but obviously now the numbers have dwindled. There's maybe only about six or seven girls left in records where before there had been about 30 because we're now spread over three sites. Freda was only one of them, she's almost like the only one that's left, if you like, that still smokes.

Caroline: Yes, but that's why you put her in that group.

Lynn: Yes, yes and that's what kind of draws us, probably together. Is the fact that we lunch everyday together and we we're both smokers. You know, you missed each other if you were off.

5.3.3 Meanings attached to smoking

Taking next a slightly different approach to understanding the participants' smoking worlds, I turn now to explore the meanings that the participants attached to the act of smoking. Here, four primary forms of explanation were in evidence. First, participants commonly cited habit as being one of the main reasons why they smoked (Figure 5.6). Thus, for Angus, smoking had become part of his daily routine *"It's more habitual than anything. I think that's really it, it's just that routine, you had that set routine and you had to stick to it and it's just a habit"*, whereas for Alex, it was

something to which he no longer attached any particular sense of meaning or enjoyment “*If I was smoking a fag, I wasn’t even enjoying this, it was just for the sake of it basically.*” Closely connected to this general sense of routine, several participants also described turning to smoking as a result of boredom. This especially seemed to be the case for the two younger female participants who would frequently find themselves alone in the house, looking after their children. Nadia, for instance, mentioned feeling tempted to have a cigarette in the evenings once she had put the children to bed “*But once the kids have had their bath and went away to bed and I’m just sitting watching the telly, and because Scott’s [her husband] not here, it’s like ‘Oh, I could just really go for a cigarette.’ So I think just boredom at night really.*”

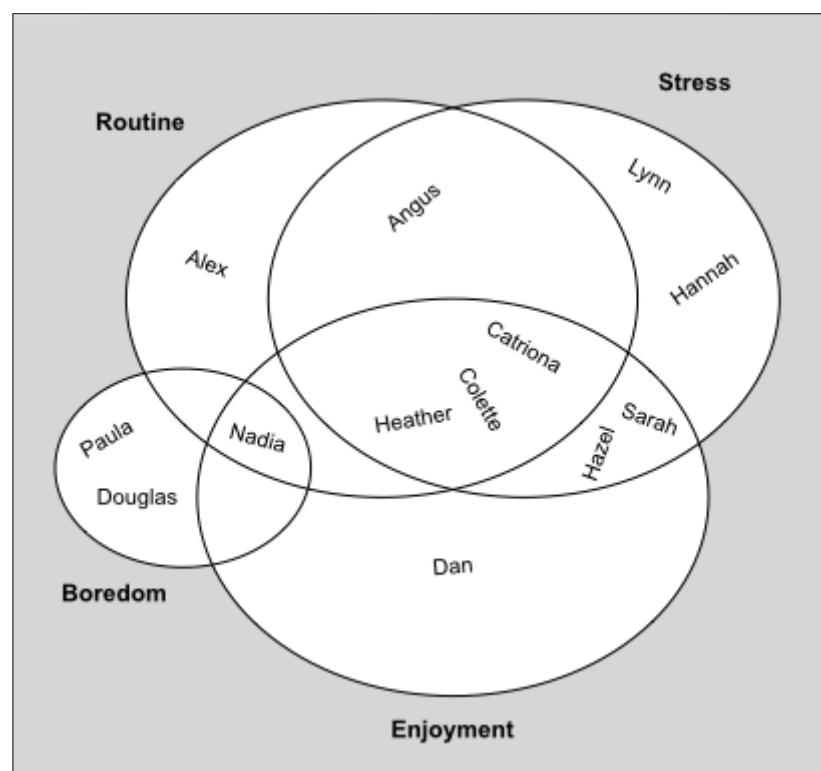


Figure 5.6: Primary reasons for smoking

In terms of more specific triggers, the majority of participants associated stress with being a particularly strong cue to smoke. For some, such as Colette, this derived from wider difficulties within their social networks “*Duncan [Colette’s son], he’s schizophrenic bipolar, so I had a hard time with him when he’s in and out the hospital with his medications and whatever. I used to make him my excuse too. I need it, I*

need my fag, but I don't really." In other cases, though, work instead appeared to be a considerable source of stress.

Caroline: But have there been any times when you felt like you really, really wanted a cigarette or needed a cigarette?

Hannah: The other week there. It was the week when I got a new client and his wife did have a go at us. There is a no lifting policy with [the charity]. The man was on the floor and she wanted us to lift him up, and we're not allowed to. So she started shouting and swearing at us, and I found that quite stressful. She wanted us out the house but we couldn't leave the house because he was on the floor.

Caroline: So what did you have to do, phone for an ambulance or something?

Hannah: Buzz for Mex. We've got a Mex... well the man was sat on the floor for ages before we even went in and she wanted us to lift him but we're not allowed to. I mean we could injure him, injure ourselves and it's illegal anyway. So she wasn't amused. But she's an alcoholic, so when she has been drinking she can be quite obnoxious at times. That night was....

Smoking was not, however, solely linked to such negative emotions and events. Just over half the participants, continued to see smoking as a pleasurable activity, whether this be in its own right, as was the case for Dan "*As I say, and I still say just now, I enjoyed it. In fact, actually, the first week or so I felt as if I was grieving and I had no treat*", or whether it be as an integral component of socialising. While Catriona, for example, had very much appreciated visiting her friend for "*peace and quiet, coffee, a fag and a blether*", Nadia would typically smoke with her friend when they were on a night out together "*Laura the same, when she used to come down here, we'd have a cigarette if we went out, even for a drink, we'd have a cigarette.*"

5.3.4 Smoking & quitting in their social networks

Finally, to conclude this chapter, I shall now turn my attention to the extent of smoking amongst the participants' family and friends, focusing in particular on the people with whom they had the most regular contact. Moreover, I take as my starting point for this analysis the observation that the patterning of smoking and quitting across participants' social networks was complex, with wide variations in the combination of current, ex- and never smokers. Within this complexity, however, it was still possible to discern several distinct groupings (Figure 5.7).

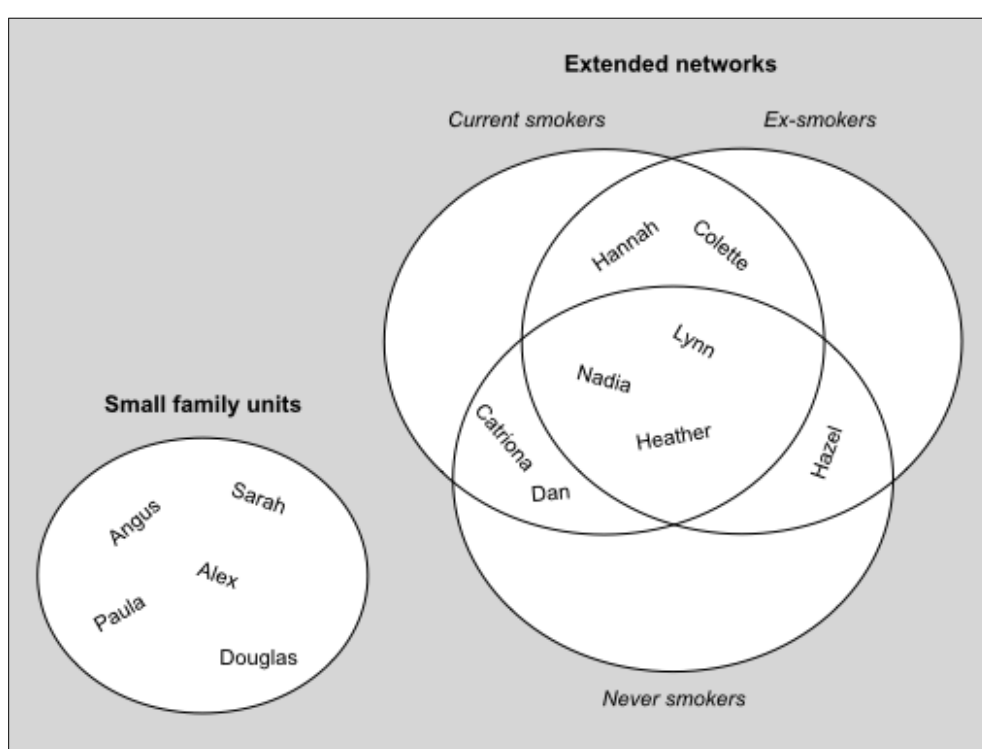


Figure 5.7: Smoking and quitting among social network members

First, there were those participants who were characterised by the fact that they belonged to small family units, encompassing both the nuclear and couple-centred families introduced in Section 5.2.1. Although these participants typically identified a wide set of family and friends within their network mappings, their day-to-day interactions tended to revolve around a smaller number of close family members. Here, then, were the two retired male participants, Angus and Douglas, whose never-smoking wives formed their primary source of social contact, as described earlier by Angus *"It's funny, we were just talking about that the other night there,*

about our social life, it's very much her [his wife] and I, you know?" In addition, there were Paula, Alex and Sarah who were currently attempting to quit with their partners, the only people in their core networks who were classified as being ever smokers. Thus, while the five participants in this grouping had only minimal exposure to smoking, they also had limited contact with people who had successfully quit in the past.

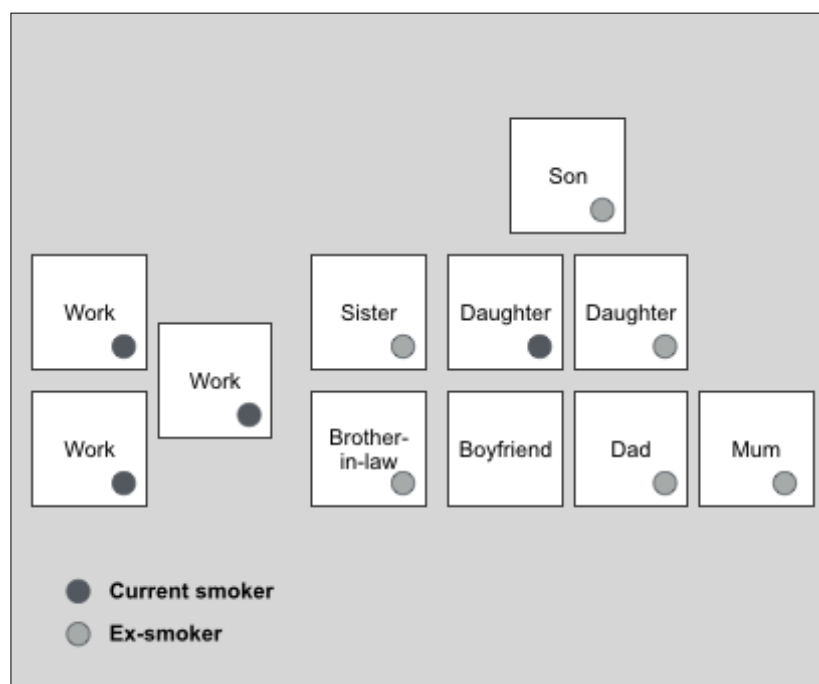


Figure 5.8: Hannah's social network mapping

Beyond these small family units, the more extended networks of the remaining eight participants were made up, in the main, of between a third and a half of never smokers. The two exceptions to this were Hannah (Figure 5.8) and Colette who each mentioned having only one never smoker within their core networks, namely their boyfriend and brother, respectively. Interestingly, Hannah's boyfriend, who she had not been seeing for long, did not object to her smoking and, indeed, even appeared to encourage her; Hannah was, nevertheless, somewhat guarded about smoking in front of him.

Hannah: He [her boyfriend] says "It doesn't bother me. If you want to have a cigarette, have one".

Caroline: So then you did.

Hannah: I did but I never smoked a lot with him. I'd have one or two if I was lucky.

There were, however, some differences in the distribution of past and current smokers across these more extended networks. On the one hand, the majority of ever smokers in Hazel's network had now given up, leaving her mother as the sole remaining current smoker amongst her closest family and friends. Dan, in contrast, mentioned knowing just one ex-smoker, his friend and work partner who had stopped smoking within the last six months, and Catriona described having a single successful long-term quitter (her sister) within her social network. A more even balance was, though, seen amongst the networks of the other five participants (Hannah, Colette, Lynn, Nadia and Heather), with approximately equal numbers of current and ex-smokers being identified. Somewhat curiously, however, this pattern was not always reflected in the participants' subjective impressions of their overall social networks. Heather, for example, perceived of her network as consisting almost entirely of ex-smokers and, as a result, she believed that her family and friends were not interested in her quit attempt as it was simply assumed that she would, at some stage, stop; this apparent mismatch may stem, though, from the tendency of participants to draw on their much wider networks when making such statements, rather than focusing on their core family and friends as I have done.

Heather: It's changed. It's totally, totally changed. We had friends round a week past Saturday... and out of, what, 15/16 of us, I can't remember how many was here, but one smoked. But prior to that every one of them was a reformed smoker, as you'd put it, apart from two because Eric didn't smoke and Walter didn't smoke. But everybody else there used to smoke. It's went the opposite way.

And then later in the interview:

Heather: And you go out in company because nobody smokes, they're not interested if you've stopped.

Perhaps unsurprisingly given the current public health emphasis on giving up smoking, and the associated changing social norms around smoking, network pressure to quit seemed to be widespread. Most commonly, such attempts at

persuasion appeared to come from the participants' parents (Lynn, Colette and Catriona), from their children or grandchildren (Paula, Alex and Angus) or from their partners (Nadia, Angus and Sarah), although Hannah did describe being hectored by her sister and Dan suggested that his work friend has become a "*brow beater*" since recently giving up himself. Whilst Heather did not appear to have been encouraged to quit by family and friends, there was nevertheless a sense that she and her daughter (Nadia) had collectively pushed each other towards stopping (see Chapter 7 for more details), leaving only Douglas and Hazel as having made no mention at all of being pressed by their social networks to give up.

5.4 Summary

In this first of the results chapters, I have sought to introduce the thirteen participants, giving an overview of their wider social and smoking worlds, with the aim of furnishing the reader with some insight into the day-to-day experiences and challenges that form the backdrop of their quit attempts. Attempts to develop an understanding of the participants' social worlds were complicated by the considerable ambiguity that surrounds terms like family and friends. I adopted, therefore, a twin-pronged strategy that began by encouraging participants to talk about their social networks in whatever way made sense to them, and then involved interpretation of the participants' accounts to establish a picture of their core networks. Due to the complexity and variation in these social worlds, it was necessary to build separately an understanding of the participants' family and friendship network patterns. In the case of family, the majority of participants belonged to extended networks that comprised both peers from their own generation (co-laterally extended), as well as individuals from earlier and later generations (lineally extended). This group did, though, further subdivide into those participants who represented the parent within the extended network, and those who represented the grandparent. By way of contrast, the remaining participants all belonged to much smaller family units, either nuclear or couple-centred families, in which the primary source of adult social interaction came from their partners. In terms of friendship networks, three main categories of friend were identified: those who were also family members, those with whom social interactions were limited to the workplace, and those more general friendships that were not associated with any particular activity or location. There

was, moreover, a wide variation in the patterning of these friendship types across participants, with more than half the participants having friends from a single category only, but very few listing people in all three groupings. A similar degree of variability was seen, moreover, in terms of the life stages that the participants had reached at the time of the study. Here, the most common life stages related to the social role of parenting, with five participants characterising their lives in terms of looking after children, whether this be young children who were still in nursery or older teenagers who were now working, and several others depicting themselves as empty nesters whose children had now left home. The life stages of the remaining participants reflected, in contrast, changes that were linked to significant life events, such as rebuilding social networks after moving home, coping with the poverty and isolation brought about through ill-health, and adjusting to retirement.

Participants' smoking worlds were equally complex. In describing their day-to-day smoking routines, for instance, the participants variously drew on the concepts of time and place. For those who were working, the timing of smoking was largely dictated by their jobs. Thus, participants would typically attempt to smoke as much as possible in the interval between waking and starting work, but would then have to limit their smoking for the rest of the day, fitting cigarettes into their set breaks. Several participants were, however, able to exercise more control over when they could smoke: client-based jobs which involved travel between appointments, jobs that necessitated extensive outdoor working, and more senior positions that allowed discretion regarding the frequency and timing of breaks, all afforded greater flexibility around the timing of smoking. As their working days came to an end, however, the constraints on these participants disappeared and they were able to adopt the less regimented smoking routines that were generally seen throughout the day in non-working participants. Perhaps unsurprisingly, in the face of such external restrictions, the place that participants most often commonly associated with smoking was their own homes, although a number did also appear to appreciate the freedom of smoking in the car away from the prying eyes of other people. In contrast to this emphasis on time and place, participants were much less likely to describe their smoking routines with reference to others, instead either seeing smoking as something that they did alone or seeing the presence of other smokers as being incidental to their own behaviour. This tendency to characterise their smoking with respect to themselves, rather than to others, was likewise seen in the reasons that they gave for smoking. Such explanations predominantly focused on the importance of routine and

habit, on the role of boredom and stress as precursors to having a cigarette, and on the enjoyable nature of smoking; only a handful of participants seemed to view smoking as having an intrinsically social element. Despite this, the majority of participants described having multiple current smokers within their social networks, the main exception here being those participants who belonged to small family units.

Moreover, the participants with more extended networks typically indicated that they knew a mix of current, past and never smokers, with the precise balance varying from one individual to the next. Detailed participant profiles are provided in Figure 5.9 & Figure 5.10 below to allow ease of reference during subsequent analytical chapters.

Pseudonym	Demographic characteristics			Social network characteristics			Lifestage ⁵
	Gender	Age group	NS-SEC ¹	Partner status ²	Family network ³	Friend network ⁴	
Nadia	F	30-39	3	C	EP	F, G, W	C
Paula	F	30-39	6	C	N	G	C
Colette	F	40-49	4	NC	EG	G	EN
Catriona	F	40-49	2	C	EP	F, G	C
Heather	F	50-59	2	C	EG	G	EN
Lynn	F	50-59	3	C	EP	G, W	C
Hazel	F	50-59	8	NR	EG	G	P
Hannah	F	50-59	6	NC	EG	F, W	EN
Sarah	F	60-69	2	C	C	F, G, W	R
Alex	M	30-39	6	C	N	W	C
Dan	M	40-49	4	NC	EP	F, W	NL
Angus	M	60-69	2	C	N	F	R
Douglas	M	60-69	8	C	C	G	P

¹ National Statistics – Socioeconomic Classification (1: highest to 8: lowest)

² C: Cohabiting partner; NC: Non-cohabiting partner; NR: Not in a relationship

³ C: Couple-centred; EG: Extended family (grandparent); EP: Extended family (parent); N: Nuclear family

⁴ F: Family who are friends; G: General friends; W: Work-based friends

⁵ C: Looking after children; EN: Empty nesters; NL: Starting a new life;

P: Coping with poverty; R: Adjusting to retirement

Figure 5.9: Detailed participant profiles

Pseudonym	Smoking history			Quit attempt in last 12 mths	Current quit attempt		SN smoking/ quitting ⁷
	Daily cigarettes	Waking to 1 st cig. (mins)	Reasons for smoking ⁶		Smoking at 4 weeks	Smoking at 12 weeks	
Nadia	21-30	6-30	B, E, R	Y	N	Y	EX (C, E, N)
Paula	21-30	n/a	B	Y	N	N	SFU
Colette	31-40	<=5	E, R, S	N	N	N	EX (C, E)
Catriona	31-40	<=5	E, R, S	N	N	n/a	EX (C, N)
Heather	11-20	31-60	E, R, S	Y	N	Y	EX (C, E, N)
Lynn	11-20	6-30	S	N	N	N	EX (C, E, N)
Hazel	21-30	<=5	E, S	Y	N	N	EX (E, N)
Hannah	11-20	31-60	S	N	N	n/a	EX (C, E)
Sarah	21-30	<=5	E, S	N	N	Y	SFU
Alex	11-20	n/a	R	N	N	N	SFU
Dan	21-30	<=5	E	N	N	n/a	EX (C, N)
Angus	<=10	6-30	R, S	N	Y	Y	SFU
Douglas	11-20	>60	B	N	N	n/a	SFU

⁶ B: Boredom; E: Enjoyment; R: Routine; S: Stress

⁷ EX: Extended networks; SFU: Small family units
C: Current smokers; E: Ex-smokers; N: Never smokers

Figure 5.10: Detailed participant profiles (cont.)

CHAPTER 6

Meaning in quit interactions

I come now to the primary findings of this study and, in each of the following three chapters, will examine a different aspect of the quitters' interactions with their social networks as they sought to give up smoking. First, I shall start by considering how the participants attempted to make sense of their social interactions (meaning), before going on to explore the steps that they took to manage and shape these interactions (agency), and finally concluding by looking at the ways in which their social interactions evolved as their quit attempt progressed (change). As such, the analyses of meaning and agency will be weighted primarily towards the information contained in the initial interview, whereas the analysis of change will look more to the follow-up interviews. Furthermore, whilst my approach here is largely inductive, with the direction of the analysis being guided by the thoughts and experiences of the participants themselves, I shall also look to theory to help clarify and extend our understanding. More specifically, I shall draw throughout on the principles and concepts of the social networks in health perspective (Chapter 2). Alongside this, I shall also call upon various psychological theories, as and when needed, to better illuminate and explain specific elements of my findings, using these theories heuristically to provide a general structure for the analysis rather than seeking to apply them in detail.

6.1 Introduction

Thus, I begin by exploring the ways in which quitters made sense of their family and friends' responses to them giving up smoking. Rather than simply describing the range of responses, I shall instead focus on articulating an analytical framework that seeks to capture how participants approached the task of formulating and organising their understandings of these responses. In this way, I aim to foreground the key components of meaning that quitters attached to their social network responses, as opposed to concentrating on the specific details of those responses. I take as my starting point the conceptual model of social networks and health proposed by Berkman et al. (2000) that views health as being shaped by multiple layers of influence, ranging from wider macro-social factors, through the immediate social networks in which we reside, to lifestyle factors and individual psychobiological characteristics (Section 2.3). Building on this idea of a multi-level framework, the participants in this study could similarly be seen to move between different *levels of understanding* (namely, specific actions, individual people, and the overall network) in attempting to disentangle the various threads of social network influence on their quit attempt (Figure 6.1).

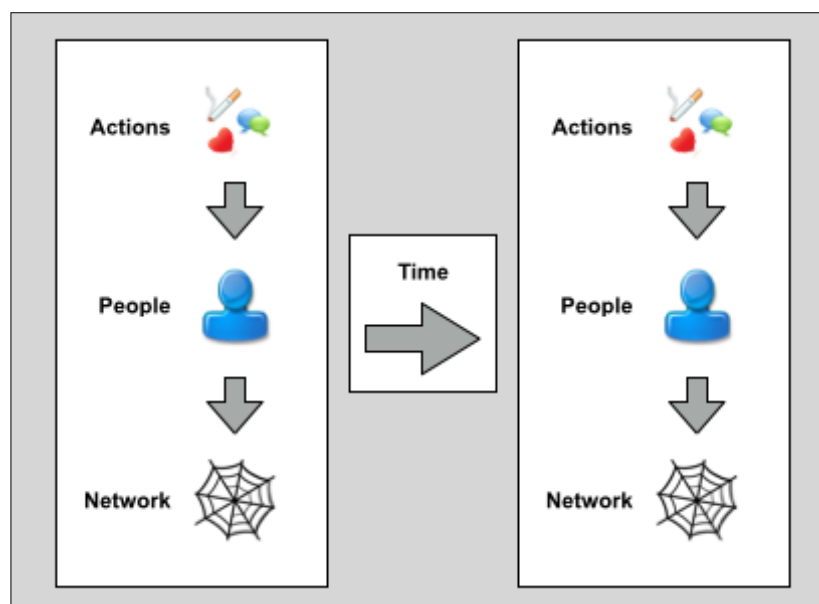


Figure 6.1: Overall components of meaning within social network responses

In the first three sections of this chapter, I shall explore each of these levels of understanding in turn. At the same time, I shall seek to demonstrate a hierarchical

element in their construction, with sets of actions amalgamating to the level of individual network members, and sets of people amalgamating to the level of the overall social network. Throughout, I shall also consider the ways in which quitters look to take account of their wider social relationships within these various understandings, reflecting the social roles, routines and past life events that help to shape their everyday lives.

6.2 The actions

I begin, therefore, with the simplest level of understanding at which quitters sought to make sense of their social network responses, namely the *level of actions*. Here, participants concentrated on individual responses in isolation, attempting to describe and explain these discrete actions without reference to any wider social context. Although this may seem to be reductionist, the commonality of such descriptions suggests that they may have presented participants with a relatively straightforward way of beginning to build up a picture of their interactions with family and friends, whilst avoiding the need to provide detailed, and potentially intimate, accounts of their broader relationships from the outset. These many and varied examples of social network responses initially looked to be wide-ranging and lacking in structure, but a closer analysis revealed instead that the participants appeared to be making sense of such actions along two main dimensions: the *type of behaviour* which distinguished between smoking-related and more general support-related actions; and the *degree of helpfulness* which focused on the action's perceived benefit to the quit and, thus involved, an element of evaluation (Figure 6.2).

6.2.1 Smoking-related actions

In terms of smoking-related actions, few participants reported being pressurised to smoke but, perhaps unsurprisingly, those that did seemed to find it particularly unhelpful. Hannah, for example, expressed considerable exasperation at being continually offered cigarettes by her work colleagues, describing how they were undeterred by her attempts to make them stop “ ‘Do you fan... do you want one then, do you?’ ‘No, I’m trying to give up. Will you just stop, no.’ ” Beyond this, there is also a sense that Hannah believes her colleagues are deliberately trying to undermine

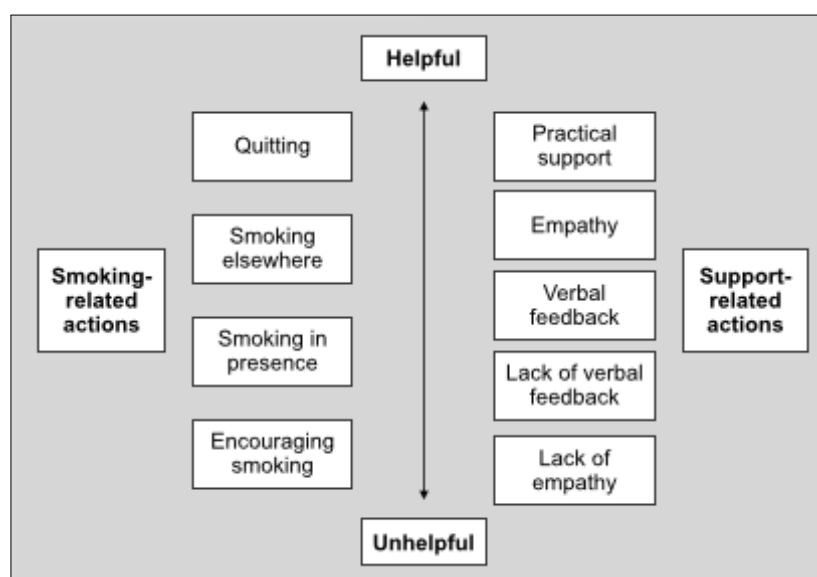


Figure 6.2: Detailed components of meaning within the level of actions

her quit attempt, a sentiment that is likewise conveyed by Lynn who suspects that her son actively wants her to relapse. In this case, however, rather than seeking to directly encourage Lynn to smoke, her son instead almost appears to goad her into having a cigarette.

Lynn: He [her son] said to me “I suppose this’ll make you have a cigarette then, mum. This’ll put you back on it.” And I said “No, you’re not doing that to me. I’m just going up to my bed. I’m not even going to think about this.”

A number of other participants, in contrast, argued that apparent acts of encouragement to smoke were, in fact, misguided attempts by family and friends to help them through a difficult patch. Despite this recognition that social network members were not being intentionally malicious, participants still nevertheless appeared to find such actions unwelcome. For instance, after a long day looking after her young niece, Hazel had been especially stressed and mentioned to her mum that she would have liked a cigarette “*You know, I could actually go a smoke right now.*” However, when her mum (who was a smoker) suggested that she could have one, Hazel criticised her for not trying to keep her on the straight and narrow “*Because mum said ‘If you really, really want one you can have one’ and I says to her ‘But you’re not supposed to say that to me, you’re supposed to say to me ‘Hazel, you’ve*

been on these patches for 3 weeks, do you really want to undo all that good work by having a cigarette?" ' ' ' Colette's best friend, on the other hand, had gone further, more or less insisting that she have a cigarette when her son was admitted to intensive care after a drug overdose; Colette, though, dismissed her friend's exhortations, pointing out that she had no understanding of what giving up smoking involved.

Colette: In fact I could kill her now. I found out my pal actually offered me to get me fags that time when Ally [Colette's son] wasn't well. And she's a non-smoker, eh. I don't care "You need a fag". She says "You're getting a fag". She says "It's like being on a diet". I says "It's totally different from being on a diet and eating a bit of chocolate, it's totally different". I think I would have passed out with the dizziness. You know you get the... you get all woosh when you have a fag. I think I'd probably have been like that. Oh God.

Whilst again not being particularly widespread, there were several accounts of social network members continuing to smoke in the presence of the quitters. As with encouragement to smoke, such acts were largely seen as being unhelpful. Thus, although Dan attempted to appear quite relaxed about people smoking around him, he did nevertheless seem to be somewhat annoyed by such behaviours, seeking to justify his reaction out of a concern for the potential impact that being in the near vicinity of smokers might have on his carbon monoxide readings when he attended the stop smoking clinic.

Dan: I am more bothered about, especially if it is a Wednesday and I'm going to a clinic that night, them smoking near me, is that going to affect my carbon monoxide reading here. I am trying to get away from them and stuff. But apart from that, no. Live and let live. But as I say, for people that you're close... and speak to you, I think they should show a wee bit of consideration. I'm not asking them to change their life just for you. The whole world doesn't stop because you've stopped smoking. But a wee bit of

consideration, I think, is common courtesy. But there you go, that's my wee niggle over, my wee rant.

Not all participants were, however, quite as disapproving of family and friends who opted to smoke in their presence, possibly suggesting that overall this was seen as being less detrimental to a quit attempt than outright pressure to smoke. For example, even though Hazel did find her mother's continued smoking to be a source of temptation, she chose not to censure her, instead concentrating on her own need to maintain will power *"As I say it's only when I see my mum or sometimes when you... you get a whiff of it and you... or you're 'Yes, I could go one of them', you know? But it's just a bit of will power. You have to keep going."* Moreover, a few participants suggested that they did not mind people continuing to smoke around them. Catriona, for instance, was generally relaxed at being around smokers (when she was taking varenicline, a non-nicotine smoking cessation medication, at least), although she did suspect that she would struggle with this more if she were to be under any particular stress.

Catriona: Yes, but I don't mind being with smokers at all. I can stand with them now, I'm actually alright with the smell, you know? I don't mind it. The only time that I would struggle being with a smoker is if I was under stress because I know I would probably say "Give me that". It's the only time that I would struggle, being with another smoker. No it's not bothering me.
[Varenicline], wonder drug!

By way of contrast to these relatively rare accounts of social network members smoking in their presence, most participants mentioned knowing people who would only smoke outwith their immediate vicinity. In nearly all cases, this represented a continuance of a behavioural pattern that existed prior to the quit; for example, Paula and her family and friends had always smoked outside *"They just smoke outside, you know what I mean? Well, we never smoked in the house anyway, it was always outside. So it is just the same, you know what I mean?"* Paula, furthermore, stressed that she did not mind when this happened *"I know that people are going out for a cigarette, but I just keep myself inside. It doesn't bother me really, I have to say, not going out and seeing them"*, a view that was similarly expressed by many of the other

participants, although a number of counter-examples were also given in which a reluctance to join social network members outside was evident, perhaps suggesting a degree of ambivalence rather than absolute indifference.

Nadia: She [her friend] was down here, must have been last Thursday and she had actually come through and had a cigarette. But, she'd come down, she's just got a wee baby, so I just sat through there and played with her baby while she come through here. I didn't want to come through and speak to her because I thought it was too tempting, so I just stayed through there and she come through.

The most helpful 'smoking-related' actions came, though, in the form of attempts by social network members to quit in tandem with the participant. Such joint attempts were reasonably common, with eight of the participants quitting in conjunction with someone else. This typically involved couples giving up together, with two exceptions. In Nadia's case, she was primarily quitting with her mum, Heather; her husband was also attempting to give up but his involvement was more sporadic as he worked offshore for a month at a time. Catriona, on the other hand, was quitting as part of a small family group, containing her husband, daughter and son-in-law. Giving up with a family member was generally seen as a positive step, with Colette explaining how helpful she had found it that her partner was quitting as well "*And as I say, because to begin with Dan was doing it and it was a big help, you know that we were encouraging each other*", although the ways in which it was considered to be useful varied considerably. At its simplest, quitting with a partner was not so much about giving each other explicit support but more about removing temptation by ensuring that there were no cigarettes in the house.

Paula: I think when you are both smokers, I don't think it is as much of supporting each other, just as long as you are not smoking together. It's like, if he went away and bought, like it was tobacco that he smoked, if he went away and bought something and started smoking, it would... You know what I mean? Because it is in your house and it is lying there... But it is the

whole point that I have got to go out and buy it and I don't want to do that, so I am not going to do that. But if it was in the house, I think it would be more tempting to do it.

For others, quitting with a social network member meant not having to go through it alone. Once again, it was not so much about providing explicit support but rather, as Heather explained, about knowing that someone else was experiencing the same *"We don't really speak about it although the two of us have stopped so obviously we're both having the same kind of feelings but nobody mentions it."* This preference for a more subtle, background type of support stemmed, in part, from a wish to avoid dwelling on not being able to smoke; Catriona pointed out, for instance, that her husband simply wanted to put it out of his mind *"He'd just like to forget about it and let's go on."* In other cases, though, the desire for more implicit support stemmed instead from a concern that, by directly sharing experiences, they might inadvertently encourage each other to have a cigarette. Nadia, for example, described an occasion on which her mother had forgotten to put on her NRT patch, only revealing that she had been struggling when the crisis was past *"But she didn't want to tell me that she's forgot to put her patch on, and she didn't want to mention it to me in case I was like 'Right, fine, we'll go and have a cigarette.' Or whatever."* Despite this hesitancy to explicitly talk about the quit, people did nevertheless find other ways, such as quietly sharing a smile, of letting each other know that they understood.

Sarah: So he'll get very busy over something and then when he starts getting very busy over something, he's probably having a wave [of craving].

Caroline: Does he ever tell you?

Sarah: No, no but I can tell and, you know, we grin because you know why. So all of a sudden he will decide to stand up and go and empty the bins for some reason or....

Such implicit strategies did not, however, completely preclude the need for mutual, explicit support. Catriona, in particular, appeared to attach considerable importance to this more overt form of support; not only did she enjoy sharing experiences with her fellow quitters and reflecting on their achievements *"I liked at the beginning talking*

about it all the time, you know what I mean? 'Do you know we've saved that amount and do you know that's not happening.' ", but Catriona and her daughter would give each other direct help and support, ringing each other up when they felt like having a cigarette.

Caroline: So what about your daughter, does she come to you at all when she...?

Catriona: Rebecca, yes. She's... she'll come... she'll phone me up, she'll say "I've just finished a hard days work" you know what I mean? "I could do with a fag, but I'm not having one". Her boy... well her partner, she's been with him for a long time, he's stopped as well. He's quite quiet. He's like Sam, he doesn't like talking about it. So Rebecca and I sit and... we support each other and help other a bit.

Negative experiences associated with joint quitting were, in contrast, very uncommon. Indeed, within their current quit attempt, only Nadia hinted at potential problems when she outlined the difficulties that she had encountered as a result of her mother and husband resuming smoking *"I think if none of us are smoking then it would be easier. But as soon as one person starts smoking then it gets harder for the other people and then because you're going about together all the time."* There were, in addition, several reports of previous stop smoking attempts being thwarted because both quit partners had experienced increased levels of irritability, leading to raised tensions and, ultimately, a return to smoking in order to avoid confrontation.

Sarah: Because the last time the pressure was so bad because we both got so noughty [irritable], I went outside and had a fag to calm myself down, so I didn't shout back at him.

6.2.2 Support-related actions

Participants did not, though, solely restrict their attention to those behaviours that involved either smoking or quitting, but also looked to make sense of more general network actions that involved the provision (or its lack) of social support. Most

helpful amongst these appeared to be strategies that were intended to provide direct, *practical assistance* to the quitter. Here, three main types of assistance were in evidence, all of which were perceived as positive by participants. First, there were those actions that were aimed at helping the quitter to maintain their motivation. Hazel's mum, for example, encouraged her to keep going, saying that she would succeed in the end "*Look, you were doing so well, you've done really, really well and it's just... you just keep trying and eventually you'll get it right. You know it'll stick.*", and emphasising all that she had achieved so far by not smoking.

Hazel: "You've got your new chair and what do you call it?
You got your garden done, you got your new gates and
everything put on". She went "Your new fridge and
you've bought this and done that, and whatever", she
says "that's all come out of no smoking."

In a somewhat different form of practical assistance, other network members instead focused on trying to tackle the cravings associated with nicotine withdrawal. For Sarah, this involved prompts from her husband to take her medication each morning "*Have you taken your [varenicline] today?*", whereas Hazel's son looked to support her by buying her an e-cigarette "*If you are really determined to do it, we'll buy you the kit.*" In contrast, Angus's wife tried to find distraction techniques that would help him through his urges to smoke.

Angus: We've just started doing jigsaws, this is, I don't
know... deviousness of my good lady. If there's a
jigsaw lying, I can't walk past it.

Caroline: Oh right.

Angus: Normally, I just walk through here and out the back.
Do my usual bit, put that, oh, there's a bit there.

Last amongst these practical strategies, were those actions that were perceived as fulfilling gate-keeping tasks. In some instances, this would involve adopting a monitoring role, as in the case of Sarah's husband, who would regularly check whether she had smoked "*I knew from the tone of voice he was asking me 'Have you had a cigarette?' "*" On other occasions, family and friends would seek to ensure that the quitter did not give in to temptation and relapse; Catriona's sister, for example,

would talk her through moments of crisis “*You can do it. Don’t do it. You’ll regret it.*”, while Heather’s husband would look to apply pressure (albeit implicitly) “*You think ‘Och, ken I could...’, you were maybe watching telly ‘I could go a cigarette’. Bob doesn’t smoke and it was like... and he’d look at you, eh, and I’m like ‘No I just, I feel like one and it’s past.’*”

Beyond these attempts to provide practical assistance, participants also appeared to appreciate *demonstrations of empathy* from family and friends, although here the opportunities for helpful intervention were seen as being more limited because only social network members who had themselves tried to stop smoking were viewed as being able to truly understand what was involved. In this regard, participants seemed to draw strength from the stories of other people’s quit attempts, particularly where, like Hazel’s friend, they emphasised how hard it is to give up “*You know and she says ‘And I ken it’s not easy.’ Because she did what I did, she just stopped like that. And she says to me, she says ‘I must have started about three or four times and, within a couple of days, stopped again. You know, this is disgusting, what am I doing?’*”

Perhaps the least interventionist support-related actions involved, though, the provision of *verbal feedback*. Rather than being viewed as uniform, such feedback was instead classified according to the perceived degree of engagement with the quit. At one end sat simple expressions of support, which involved either statements of general approval “*Good for you*” or, as in the case of Douglas, reactive feedback in response to a specific comment “*So I said ‘I might as well start smoking’ but then I thought that would be stupid. She said ‘You’ve done great so far.’*” Although welcome, such feedback was sporadically given and generally considered to be of only limited significance because, as Alex explains, it does little besides providing an overall feeling of well-being “*It is good to hear when they come and say ‘Good for you’, that makes you know you are doing something good. But it has just been mostly me and Paula. But the nice comments from the family and friends and all that is good.*” In contrast, feedback that was not directly elicited by the quitter, but instead volunteered proactively by family and friends, seemed to be particularly appreciated; Sarah, for instance, was especially elated to receive a message on social media from a member of her wider, dispersed network.

Sarah: But one of them who’s an Indian girl called Ramani,
from India, actually put something up [on Facebook]
on her own five weeks later and said “How’s it going,

Sarah?” I’m thinking “That’s amazing. I haven’t seen you since 2004.” I thought that was lovely.

Not all attempts at providing support were, however, viewed as positively, with several participants reporting being less than satisfied with some of the verbal feedback that they received. Nadia, for example, seemed somewhat put out by the doubt expressed by one of her work friends regarding her ability to succeed. Moreover, she also perceived the lack of feedback from a number of her close friends somewhat negatively.

Nadia: They’ve never said anything from when I stopped smoking but they used to moan all the time when I was smoking.

Caroline: So now they just don’t say anything?

Nadia: No. They’ve never really said anything. Karen, she doesn’t think I’ll do it. But everybody else like Pamela and that, from my work, every week I go in and she’s like “Well, you still stopped?” I’m like “Aye.” And she’s like “Oh, you’re doing really well.” Jean’s the same, but Karen and that, she’s like “Oh, you’ll never last.”

Efforts to demonstrate empathy, in particular, appeared to backfire on a number of occasions, with family and friends not always finding it easy to know what to say, and sometimes refraining from mentioning the quit attempt at all, for fear of upsetting the participant, as we see from Lynn’s mum who was initially “*mentioning it all the time*” but started asking about it less often as she was “*frightened to ask*”, having being told by Lynn “*I really don’t want to talk about it*”. Attempts by never smokers to suggest that they understood were also not well received. Catriona, for example, felt that her mum was trivialising what it meant to quit smoking by comparing it to giving up caffeine “*Unhelpful? My mum because she thinks she knows what it’s like to be a smoker. You know ‘You can stop, it’s so easy. It’s just like stopping coffee.’ But she’s never smoked in her life. So people that have never smoked don’t realise the addiction of it and that’s not helpful.*” Moreover, whilst participants generally welcomed recognition that quitting is extremely hard (see above), they were sensitive to suggestions that the urge to smoke might never completely leave them; Lynn, for

instance, leapt to contradict her husband (Mark) when he attempted to point out that he had heard of people returning to smoking after being stopped for many years.¹

Mark: But there are people told me, I knew a man who had stopped for ten year and he started smoking again. So to me it doesn't really leave you, you know what I mean?

Lynn: Oh, it does leave you. It doesn't leave you... maybe there's a wee bit there but it's not as intense as it was when you first stopped.

6.3 The people

Having thus far focused on individual actions, I shall now move on to consider the meanings that quitters attached to social network responses at the *level of people*, the intermediate layer of understanding within the framework outlined above (Figure 6.1). As with individual actions, participants simultaneously sought to both describe and evaluate the overall behaviour of social network members although, not unexpectedly, they were less likely to make judgements about specific people than they were about isolated actions, and when they did venture such opinions, these typically tended to be brief, related to family members rather than friends, and concentrated on one aspect of the person's behaviour. Most often, participants focused on those people they considered to have been beneficial in relation to the quit; there were, however, some examples of network members who were viewed as being less than supportive.

Hannah: He's [her boyfriend] been really supportive. "How many weeks now?" or "How many days?" or "Good for you, keep it up" and "I'm very proud of you". He's been really good. Encouraging.

¹Although I interviewed Lynn on her own, her husband joined us towards the end of the session because their son was using the kitchen

And then later in the interview:

Hannah: My mum, not so. I thought she might have been but she was alright at the beginning but it seems to have tailed off for some reason. I don't know why.

Nonetheless, this paucity of direct, detailed evaluations about individual people did not mean that quitters were not implicitly making such judgements. In order to access these evaluations, I had instead to draw together examples from across the interviews to build a picture of how participants had made sense of the responses of specific people. Here, I identified three inter-related spheres of meaning (Figure 6.3) which contributed to the overall evaluations, namely the combination of actions in which the person engaged, the wider social relationships within which the interactions took place, and the degree of importance the person was considered to have had in relation to the quit. It is to these person-based spheres of meaning that I shall next turn.

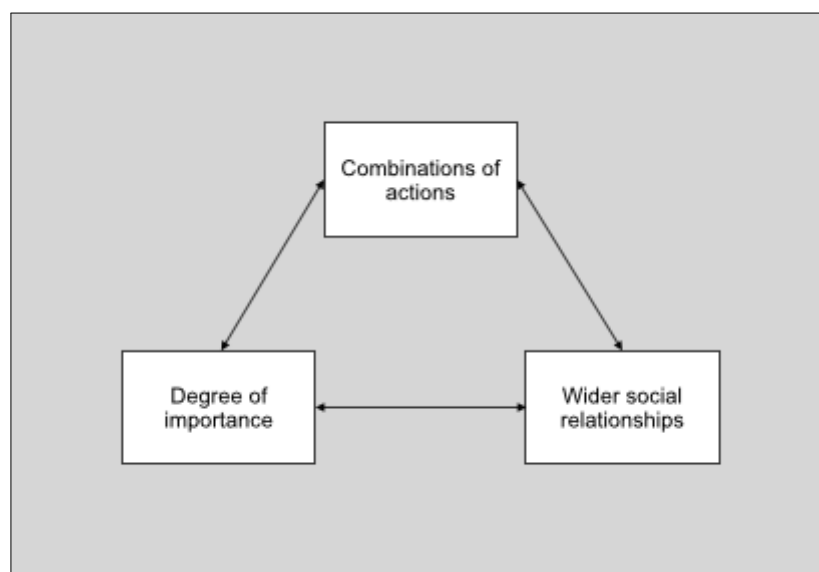


Figure 6.3: Detailed components of meaning within the level of people

6.3.1 The combination of actions

Where some social network members appeared to be associated with a single response, others were involved in a complex combination of different actions. Moreover, participants appeared to make sense of these multiple behaviours in three distinct ways. In some cases, all the actions of a particular individual were judged to

be equally helpful (or unhelpful) and were, therefore, seen as being mutually reinforcing. Sarah's husband, for example, was supporting her in a whole range of different ways and, as a result, she mentions more than once that *"I couldn't have done it without Graeme."* Not only did he give up a few weeks before her but, as discussed in Section 6.2.2 above, he regularly checks (implicitly) whether she has smoked during the day *"And he said 'OK day then?' and I knew from the tone of voice he was asking me 'Have you had a cigarette?' "*, as well as making sure that she has taken her medication *"It's practical stuff like saying 'Have you taken your [varenicline] today?' "* In addition, she finds that the fear of discovery keeps her from having a cigarette at home.

Sarah: I'm sure there's a side to it, I'm thinking "He will smell it and I'll get caught out", if I'm honest. There's also total guilt and so I think it's more than one thing.

In contrast, Lynn describes her husband's reaction as being more variable. On the one hand, he had refused to try and quit with her *"I did say when I was stopping 'I would love for you to stop as well, and it would be easier if we both could do it' and he said 'Oh Lynn, no'. So that's it."*, and then he compounded this by forgetting on the first morning that she was giving up *"He was sitting smoking and I says to him 'I don't believe you've done this to me.' That was the first thing I went into the kitchen..."* On other occasions, however, he appeared to be more supportive and, after the initial slip up, now no longer smoked in front of her *"But it's like Mark, if I go through and he's having a cigarette, he'll put it out or he'll go away outside."* Moreover, she acknowledges that he does also give her praise and encouragement *"She's [a work colleague] quite good you know she'll say 'The time's going in, you're doing really well' and things like that and so do some of them at my work and Mark's the same."* For Lynn, though, all these later attempts at being supportive are overwhelmed by the fact that early on, when she had first mentioned on holiday that she was going to quit and would not, therefore, be taking any cigarettes back with her, Mark had quite vocally expressed his doubt that she would be able to succeed. Lynn's predominant reaction to her husband was, therefore, negative.

Lynn: And it's his words are knock me down "You're never going to manage this, you know. You tried before and you know you never managed it. So let's take

cigarettes home anyway.” And I said “No, I’m not doing that.”

Hazel’s mother, likewise, made a range of positive and negative responses; she both continued-> to smoke around her daughter *”I’ve been trying to get her to stop for years but... I even bought her the Sky Cig but... and she still smokes around me<!--”* and, as we have seen previously in Section 6.2.1, offered her cigarettes when she is feeling uptight. Despite this, however, her mother is making an effort to change her smoking behaviour (see Chapter 8), and Hazel has noticed that she is attempting to cut down in her presence *“Basically likes of... see like when we go out shopping my mother whenever we come to the shop my mother normally lights a cigarette. Now she’s not, she’s going into the car and waiting till she’s getting home.”* In addition, she also acknowledges Hazel’s achievements *“Good on you because I couldn’t do it.”* and (again like Lynn’s husband) looks to give her encouragement *“Look, you were doing so well, you’ve done really, really well, and it’s just... you just keep trying and eventually you’ll get it right. You know, it’ll stick.”*

While her mother’s response is, on the face of it, very similar to that of Lynn’s husband, Hazel appears to simply accept the inconsistencies in her mother’s behaviour, without seeking to cast her as being either generally helpful or unhelpful. These contrasting understandings may, perhaps, have their roots in the very different attitudes that Lynn and Hazel have towards their social network members giving up smoking: whereas Lynn is very clear that she would have liked her husband to quit at the same time *“I would like him to have stopped. I would loved him to turn round and say ‘Let’s give this a go together’ ”*, Hazel is much more ambivalent about whether her mother should stop. On the one hand, her mother is due to have an operation and Hazel is worried about potential surgical complications if she does not give up smoking, while on the other hand, Hazel is concerned that quitting might lead to pneumonia, plus she does not want to deny her mother one of her only remaining pleasures in life.

Hazel: But she’s waiting to go in to go and get her gall stones out, so I’m saying to her, I says to her “You need to get a general anaesthetic, Mum”, I says “and you have to think about...” She’s lost a stone in weight, which is good. She’s going in the right direction. So I says to her “If you could keep up this, cutting down and cut

the cigarettes down”, I says “and see when you get word to go in, even the day before, put the patch on and don’t have any nicotine in your system because”, I says “that’s what causes complications.” She’s 77. I don’t want to lose her you know? I ken I’m being... I’m not being selfish but she will go eventually but I’m not ready to let her go yet. And I says to her “At the end of the day, don’t just stop smoking because I’ve stopped smoking. If it’s the only thing you’ve got and you are...” She doesn’t go to the Bingo, she doesn’t do nothing, she doesn’t go out unless we take her out now.

And then later in the interview:

Hazel: I don’t know if I want her to stop... I’m always scared... if she stops smoking my mum’s got such a weak chest as it is I’d be frightened that she’d take a cough and she’d get pneumonia and it’d maybe finish her. And it’s a horrible thing to think about.

6.3.2 The wider social relationships

Thus, by attempting to make sense of a social network member’s behaviour across all of their individual actions, participants can begin to develop a deeper understanding of that person’s overall response. Such an understanding will, however, only ever be incomplete if it fails to take account of the wider relationship within which these behavioural patterns are embedded. I shall turn in this section, therefore, to consider the ways in which quitters seek to reflect these broader relationships in the meanings they attach at the ‘level of people’. Here, I shall draw specifically on the concepts of the social role, in which the behavioural expectations surrounding a particular role are seen to be governed by a set of socially defined rules (Dillon, 2010), and significant life events which bring about changes in the shape of a person’s everyday life and the roles that they adopt (Hutchison, 2011).

Considering first the influence of social roles on giving up smoking, the most relevant roles appear to be those that people take on within the family (mirroring the bias

towards family members in people-based evaluations more generally). In the introduction to this section, for instance, we saw that Hannah seemed somewhat disappointed with the level of support she received from her mum “*I thought she might have said ‘Look, how long has it been?’ , or ‘You’re doing great.’ Nothing. So.*” Although she does not expand any further on the reasons for her feelings of dissatisfaction, I venture that Hannah’s particular disappointment with her mum might stem, at least in part, from the typically supportive and encouraging nature of the mother-daughter relationship; she does not, after all, express similar feelings of dissatisfaction towards other close family members, such as her sister, who equally appears to fall short of providing the high levels of support that Hannah looks for from her mother.

For others, understandings were formed not in relation to specific relationship categories, such as family or friend, but rather in relation to shared identities that were rooted in a particular lifestyle. Here, this was most apparent in the differential expectations that the participants seemed to hold for smokers and non-smokers. Taking the example of Hazel, whilst it was her mum who was continuing to smoke around her, and sometimes directly in her presence, it was her dad that she identified as being somewhat unhelpful because he had suggested that using e-cigarettes or NRT products was not a good idea “*Well, don’t shoot me down if I take that or put a patch on or whatever. It’s better than me blowing smoke up your nose.*”

Closely linked to the concept of the social role, *social routines* appeared to be a further mechanism by which the wider context exerts itself on the understandings that quitters form in relation to the responses of their family and friends. By this, I refer to the joint behavioural patterns that social network members establish over the course of time, and which typically come to assume specific meanings within their relationship. Turning here to Nadia, for example, her husband works away for four weeks at a time, and they have developed a routine of spending time together when he is home, enjoying themselves and relaxing. Before her quit attempt, Nadia had associated such occasions with more excessive smoking and, as a result, she expressed some doubt about her ability to remain quit if her husband continued to smoke, raising the issue (to which I shall return in Chapter 8) of dispersed relationships and the danger that they can represent for the quit attempt.

Nadia: Because when Scott comes home we go out for dinner
an awful lot, and that’s pretty much, you go for your

dinner, you have a cigarette in the car coming home, kind of thing. It'll be harder when he comes home because we will be going back out for dinner.

And then later in the interview:

Nadia: And I think, like, when Scott comes home we were going to go away for a week's holiday, just the two of us, but we can't because my sister's due around about the same time. I think that would be the hard because every time Scott comes home we either go away for the weekend or try and go away for a wee holiday or whatever. It's always, we probably smoke more when we go on holiday because you're chilling out more, you've not got the kids, you're drinking. And so we probably smoke an awful lot more.

Beyond these more routinised elements of behaviour, significant life events similarly form an integral component of our wider relationships, with the joint history that we share with members of our social network helping to shape all subsequent interactions between us. This was clearly evident in Lynn's case; her husband had a major accident a number of years ago, leaving him with a range of problems (including a difficulty in remembering) and he has since been unable to work. As a result, she appears to be somewhat protective of him, not wanting to make his life any more difficult by, for instance, forcing him to quit smoking *"the changes that's happened to him over the last few years, I don't want to push him into that. He enjoys it."* Furthermore, she tries to be understanding of his memory problems, not wanting to be too critical about his failure to remember that she was giving up, and trying to keep a sense of humour about it, despite the fact that she feels very hurt and let down.

Lynn: But, Mark, when I got up in the morning - it's quite funny actually. He has a coffee, he doesn't sleep well. He's up pretty early. He forgets things, that's one of the problems that he has, and he repeats himself a lot and he's also got some issues with time. When you meet him, you would never guess but as you talk to him, he tells you the same thing sometimes, over and

over again and he had forgotten. We had spoken about this for weeks and he knew about it.

And then later in the interview:

Lynn: I'm angry that he'd forgotten because I thought "How could you forget something as important as this?"
Well, it is important to me. It probably isn't as important to him, obviously. And maybe because what's happened to him. He does have problems remembering things.

6.3.3 The degree of importance

We saw in Section 6.3.1 that Sarah viewed the wide ranging support that she received from her husband as being key in her attempt to give up smoking. Not all social network members were, however, as central. Sarah's reflections, for example, on the support she received from her sister compared to that she received from her husband suggest that the degree of influence can be qualitatively different across individuals. While still much appreciated, the support of her sister was inevitably much weaker as she lived some considerable distance away, and her role in the quit was, therefore, much less significant.

Sarah: I think he's a rod of iron. I think he's ... no that social support from Graeme... and I mean I've got social support from my sister and various other people, but that's just wishy washy social support.

Thus, the degree to which family and friends were seen as having an impact on the quit varied across a spectrum, at one end of which lay the people (like Sarah's husband) whose contribution was viewed by the quitter as being particularly important. Most common amongst this group were the fellow quitters; in response to a question about whether she would have been able to give up without her partner, Paula answered "*Oh no. Definitely no.*" In other instances, high levels of importance were also attached to people who had made a sustained effort to engage with, and support, the quit. Angus, for example, described his wife as providing a strong guiding influence that made up for his own shortcomings "*No, she's very supportive, I*

must admit. She's quite dominant with me because I've got, I've not got, what is it? Will? No, it's not will, what is it? Self-motivation." The input of network members who were central to the quit was not, however, always seen as being positive. Thinking back to the case of Lynn above, the two overriding actions against which she evaluated her husband were his immediate assumption that she would not succeed and his failure to remember that she was giving up on the first morning of her quit. Perhaps somewhat surprisingly, Lynn managed to turn this around, using his words to help her through times of temptation and, in this way, her husband acquired a particular importance in her quit attempt.

Lynn: And that, when I really feel like a cigarette, that's what comes to my mind. That's keeping me ticking on, I go "No, no, no, I'm not going to have one because that's what he's expecting. I going to show him."

At the other end of the salience spectrum, lay those family and friends who were largely viewed as being peripheral to the quit. Two distinct categories were evident here: those people who played a peripheral role in both the quit and the participant's social network more generally, and those people who played a peripheral role within the quit despite being a core member of the participant's social network. Examples of the former include Alex who was confident that his brothers would be supportive of him trying to giving up even though they saw him rarely and, therefore, had little or no impact on his quit attempt *"Obviously they will be chuffed at no smoking anyway, because none of them smoked really anyway. Mostly as I say, mostly just my mum that would say 'You's are doing well', like the both of us, as she comes in. Because my wee brothers and my older brothers I don't really see that often anyway."* In contrast, Lynn sees her best friend (Lindsay) nearly everyday. Nevertheless, Lindsay's input into her quit attempt was likewise minimal, not going beyond simple statements of verbal encouragement *"No, I don't think they've helped, but they haven't hindered either, Lindsay, she always says 'Oh, you've done really good.' "*

6.4 The social network

I shall now finish this chapter on meaning in quit interactions by exploring the final level of understanding, the social network. To recap from Chapter 2, we saw that

Smith and Christakis (2008) define the social network as being “*the web of social relations around an individual*”, with Christakis and Fowler (2009) stressing that the behaviour of the network as a whole is not solely determined by the characteristics of the separate individuals, but is also shaped by the patterning of ties between network members. In terms of individual behaviour, moreover, wide-ranging research has variously examined the nature of specific dyadic relationships and the conjoint influence of several network members acting in combination, as well as the more structural features of the network. Whilst the meanings attached to dyadic relationships were the focus of the previous section, here the emphasis will be on the other, higher-level aspects of the social network. The data in this regard are, however, relatively sparse as participants appeared to be more comfortable in providing detailed accounts of their relationships and interactions with specific network members. There was, nevertheless, still some evidence that hinted at the possible relevance of these higher-level constructs.

First, in a number of cases, participants were seen to reflect on the combined influence of family and friends. Most directly, this involved drawing comparisons between the responses of two network members. Catriona, for instance, contrasted the highly supportive behaviour of her father who, as an ex-smoker himself, had been desperate for her to stop, with the less helpful approach of her mother who suggested that quitting smoking was straightforward and akin to giving up caffeine.

Catriona: Oh my dad’s... he gets so frightened. He’s always been... all the time and when he came to visit he would just say “Please, please stop”. But he’s delighted. My mum thinks she knows what it’s like to stop smoking but she’s never been a smoker but, no she doesn’t realise how addictive and how difficult it is. She put it to stopping drinking caffeine. “Well if I can stop drinking caffeine...” It’s nowhere near that you know, I can stop caffeine.

Beyond these comparisons, however, there were also several accounts of social network members pulling participants in opposing directions. For Nadia, these competing forces appeared to be implicit as she described having to choose between joining her non-smoking father at the barbecue or sharing a cigarette with her mother and sister on the other side of the garden “*He was cooking the barbecue, and my*

sister and Mum were sitting at the top of the stairs so I went up to sit with them and had a cigarette.” By way of contrast, Hazel’s parents had openly expressed their disagreement about whether or not her mother should give her a cigarette to calm her down after a particularly stressful incident involving her own daughter.

Hazel: “What are you doing? Don’t encourage her, Moira. You shouldn’t be encouraging her, because she wants to stop.” And I say “Dad leave me!”

Caroline: So is that when you went for a ... when you asked for one, was he saying that then?

Hazel: Aye. And he went “You’re not needing a cigarette” and I’m like “I’m sorry...” He went “It’ll not help you”. I went “You’re not helping me.” But my mother, she was backing me up... not as strong willed as what he... he wouldn’t have given me one if he was smoking. He would have said “No, you’re not getting one.” But he says to my mum “You’re not helping, you’re making ... that’s it, she’s going to start again, now”.

Although participants did not directly talk about the structure of their social networks, perhaps unsurprisingly given the rather abstract nature of this concept, they did on several occasions allude to a possible connection between the shape of their family networks and the experience of giving up smoking. We saw in Chapter 5, for example, that Paula and Alex belong to a nuclear family in which their primary day-to-day contacts are their two children and Alex’s mum, who is a non-smoker; moreover, outside of each other, they rarely see the other smokers within their social network. As a result, there is very much a sense that the two of them are in it together *“I would just say me and Alex ourselves, actually. You know what I mean? Just making sure that we don’t go back into our old habits. I think that has been the best support really”*, making it much easier for them to stay quit *“I think it made it easier for both of us stopped smoking. Because, if Paula still was smoking, I probably would have had a fag.”* For others, though, the dispersed elements of their social networks had almost worked against them, making their quit attempts much harder. Nadia, for instance, explained her concerns that the non-smoking routine that she had managed to establish might be disrupted the next time her husband, Scott, was on home leave.

Nadia: I'm worried about when Scott comes home though. I think probably will be the hardest. Because he's been away and I've got into my routine of not smoking and that, I don't know what I'll be like when he comes home. If he's still stopped then hopefully it should be all right. But if he's not still stopped when he comes home, I think that would be a bit of a nightmare.

6.5 Summary

Participants made sense of the social interactions that surrounded their quit attempts in sophisticated ways, reflecting the complexity and multi-dimensionality of their network responses. Their attempts to disentangle this complexity moved between different levels of understanding, the first of which focused on the individual actions of network members, looking to describe and explain each response separately, rather than seeking to set them within any wider social context. Moreover, participants attempted to make sense of these individual actions with reference to two main dimensions of explanation: the type of behaviour, which categorised actions according to whether they were smoking or support-related; and the degree of helpfulness, which provided a more evaluative assessment of the perceived benefit to the quit. Despite being relatively rare, the most unhelpful smoking-related actions were seen as being those that involved encouragement to smoke, although participants did appreciate that such actions were not always intentionally malicious but were, instead, misguided attempts to help them through a particularly difficult situation. There was, however, a more variable reaction to family and friends smoking in their immediate presence, with some participants viewing such behaviour as being selfish and inconsiderate, whereas others suggested that they were untroubled at being around smokers. On the whole, participants appeared largely neutral about social network members going elsewhere to smoke, particularly where this represented a continuance of a behavioural pattern that had existed prior to the quit. Perceived to be most helpful among the smoking-related actions, though, were efforts by family and friends to quit in tandem with the participants, with such joint attempts bringing a source of both implicit and explicit support.

More general support-related actions, in contrast, involved the provision (or not) of social support. Direct practical support was viewed in an especially positive light, whether it be in the form of helping participants to maintain motivation, in supporting them to deal with the problems of nicotine withdrawal, or in performing gate-keeping functions that diverted them from relapse. Demonstrations of empathy were, in the main, also seen as being helpful, although participants did suggest that only network members who had themselves attempted to quit could truly understand what was involved. Moreover, attempts at empathy that failed to find the right tone appeared to be judged particularly harshly. Reaction to verbal feedback was, likewise, equivocal. Whilst proactively given feedback was generally appreciated more than that which had to be elicited by the participants, a complete absence of feedback was taken to imply a lack of interest in the quit.

Understandings at the level of people, on the other hand, began with attempts by participants to attach combined evaluations to all the actions of a specific social network member. Although this task was, perhaps, at its simplest when the individual actions were adjudged to be equally helpful (or unhelpful), and could therefore be viewed as being mutually reinforcing, participants still nevertheless sought to formulate overall evaluations even when the patterning of actions was more contradictory. Interestingly, participants were sometimes seen to come to differing evaluations of apparently similar combinations of actions, suggesting that they may be taking wider aspects of their underlying social relationships into account. Indeed, a closer analysis here revealed the influence of shared life histories (i.e. the cumulative pattern of joint experience that two people acquire over the course of their relationship together) on the meanings that participants attached to the responses of their family and friends, with social roles, routines and past life events all playing a part in shaping their understanding. Not all network members were viewed, however, as having the same degree of relevance to the quit: family and friends who joined in with the quit or who made sustained efforts to help were seen as being particularly important, whereas more dispersed network members were described as being less influential.

Accounts relevant to the third and final level of understanding, that of the social network, were less common, although there was some evidence that participants did not solely limit their reflections to their immediate dyadic relationships. Instead, they were seen to draw comparisons between social network members in apparent attempts to justify why some responses were felt to be more helpful than others, and also

described situations in which they felt as if they were being pulled in opposing directions by family and friends, with some network members representing a potential source of cigarettes and others providing a guard against relapse. Beyond this, however, the shape of the participants' family networks appeared to have a bearing on their experiences of quitting, with nuclear families typically providing a supportive environment that facilitated the quit, whereas the occasional nature of encounters within dispersed networks made it more problematic to overcome pre-existing associations with smoking.

CHAPTER 7

Agency in quit interactions

7.1 Introduction

Having started by examining the meanings that participants attach to the social network interactions that occur around quitting, I shall now take a slightly different tack and consider the role of *quitter agency*. Bandura (2006) defines agency as the capacity of an individual “*to influence intentionally one’s functioning and life circumstances*” (p. 164). Thus, agency can be seen as encompassing both the ability to determine one’s own choices and actions, and the ability to shape the surrounding world, although authors such as Dillon (2010) stress that the extent to which we are able to exercise agency is constrained by the social structures that form the fabric of our society. Within the study of health outcomes and inequalities, Thomas (1999) points to a general tendency to reduce the concept of agency to a simple focus on individual lifestyle behaviours or on psychosocial characteristics like self-esteem. Indeed, research on smoking cessation has typically focused on aspects of agency such as will power and self-control (Baumeister and Vonasch, 2015; Scottish Government, 2015f). As a result, Thomas (1999) argues for an alternative view of agency, one akin to the definition adopted by Bandura (2006), which emphasises the role of the individual in making sense of, and acting upon, their wider environments. In keeping with this approach, I shall use the term *agency* to refer specifically to the actions that quitters take in attempting to manage their interactions with social

network members. Here, moreover, I shall seek to better understand these actions by drawing upon two conceptual frameworks. The first, outlined by House et al. (1988b), characterises social relationships according to two separate dimensions: structural components where the emphasis is on how social networks are constructed (and in particular on the nature of the ties that connect individuals together), and functional components where the focus is on the interactions that take place within these networks, and on the flow of social resources across them. A second, somewhat broader framework (Berkman et al., 2000) further conceives of these structural and functional components of relationships as acting on health through various individual-level pathways, including psychological processes such as self-efficacy and self-esteem. (A more in-depth discussion of both frameworks can be found in Chapter 2.)

More specifically, my analysis here identifies two broad types of strategy that quitters adopted in navigating their social worlds: attempts to influence interactions with social network members; and attempts to build a quitter's internal resources by both pre-empting the responses, and drawing upon the experiences, of others. Thus, within *The external social world* (Section 7.2), I shall explore the ways in which participants attempted to modify the structure and the function of their social networks. In relation to network structure, this involved looking both to reduce contact with smokers (Section 7.2.1), and to reduce exposure to the act of smoking itself (Section 7.2.2), whereas in relation to network function, the emphasis was on shaping the level and nature of the social support available (Section 7.2.3). I shall then move on to consider *The internal psychological world* (Section 7.3) of quitters, in particular discussing the ways in which they sought to maintain, and strengthen, their personal resources. In this regard, participants variously looked to devise strategies that would enable them to maintain their levels of motivation through reference to others (Section 7.3.1), to extend their knowledge of the quit process (Section 7.3.2), and to manage potentially negative behaviours among social network members (Section 7.3.3).

7.2 The external social world

7.2.1 Reducing contact with smokers

I shall begin by considering those actions that were aimed at reducing *contact with smokers*. Such actions were particularly commonplace, with all but two of the participants looking to adjust the balance of smokers amongst family and friends. Perhaps the most direct strategy here was to try and enlist their fellow smokers into quitting alongside them, thereby altering the structure of their social networks by changing the smoking status of the individuals within it. Such a strategy was typically targeted at people with whom the participant had a close relationship (i.e. a partner, parent or child) and with whom they had previously smoked on a frequent basis. Several participants took a lead role in instigating a joint quit attempt. Colette, for example, had made up her mind to give up after being embarrassed by the reaction of a friend who worked in a local supermarket *“I asked her for my fags, 20 John Player Blue. And she went and got them and then she rang it up in the till and she went ‘ah’ and she looked at me and then she looked at the price again and I went ‘I know’. And it kind of shamed me that.”* Colette had then continued to smoke for the remainder of the week before informing her partner (Dan) that she was intending to quit and offering to give him a lift to the stop smoking clinic the following week *“I said to him, right if you want to go, I’ll pick you up.”* Despite his agreeing, Colette is nevertheless very aware that Dan would not have been trying to quit without her *“But he only did it because I said I was going to go. He didn’t even want to stop smoking”*. This was confirmed by Dan himself, who not only acknowledged that he had not even considered giving up before Colette had mentioned it *“It was just Colette that said. I had no intentions of quitting. As I say, and I still say just now, I enjoyed it”* but also confessed to remaining dubious after attending the clinic *“I thought, I was sceptical about it, put it that way, because I didn’t really think these products would work or whatever. Plus, I knew I had no willpower.”*

For others, however, the process of decision making was less clear cut and, instead, involved a gradual movement towards quitting together. Nadia, for instance, describes how she had been discussing giving up with her husband for some considerable time *“We’ve spoken about stopping for ages”*; moreover, her mother (Heather) had made it clear that she would also like to quit but would find it difficult

to do so when Nadia was still smoking *“She’s been desperate to stop for ages but she’s been like waiting on me, because she doesn’t want to do it if I was still smoking.”* Hence, whilst it was Nadia’s husband who initially broached the subject of actually trying to quit *“He was just like ‘Well I’m going to try and... There’s no point in us stopping together when we’re in the house because it would be a nightmare.’ So because he was going away he was like ‘Do you want to just try giving up after...?’ ”*, this was against the backdrop of their previous discussions about wanting to stop. Furthermore, when Nadia mentioned the possibility of quitting to Heather, she readily agreed *“Aye, I’m quite happy with that”*, again reflecting the fact that the groundwork had already been done. Interestingly though, Heather’s account of how they came to the decision is somewhat different as she recalls being the one to raise the issue *“I says to Nadia, I says, I am thinking about stopping smoking. She says ‘If you’re going to stop, I’ll stop with you.’ And we did.”*

The path by which smokers found themselves quitting together was not, however, always as consensual. Sarah, for example, attempted to seize the initiative, telling her husband (Graeme) that she was going to quit alone to avoid problems with them both being irritable. She had only managed to reduce her smoking down to five cigarettes a day, though, when Graeme announced that he was also going to stop. He subsequently managed to quit with apparent ease, whilst Sarah struggled to give up her final few cigarettes; as a result, their roles were reversed and Sarah now found that Graeme was pushing her to quit completely.

Sarah: So this time what happened, I said I was going to give up and I said “Look this time we’re not doing it the same time, no pressure on you.” Because the last time the pressure was so bad because we both got so noughty [irritable], I went outside and had a fag to calm myself down, so I didn’t shout back at him. I’m just not doing it that way this time. So I started going to the Smoking Clinic and I managed to get it down to five a day on patches. And there were three very nice women supporting me, for want of a better word. And then Graeme all of a sudden announced... this is typical of him, he said “I’m giving up smoking, I’m going to the doctor, I’m getting [varenicline]”.

Caroline: Right, OK.

Sarah: And that was it. He went on [varenicline], did it for the week and then stopped, and he hasn't had a cigarette since.

And then later in the interview:

Sarah: Meanwhile, I'm now smoking outside my five cigarettes a day but because he's not smoking, and I can't smoke in front of him and he's getting a bit... I get that look. So he's a bit grumpy with me. That's good because it keeps mine down to five a day, but I just cannot do that last bit

And then later again:

Sarah: So I started the [varenicline], I think the week before Christmas and I'm not very good at taking tablets and Graeme kept saying to me "So when are you giving up?" Because it just wasn't happening.

Beyond these actions aimed at identifying someone with whom they could make a joint quit attempt, a number of participants also sought simply to encourage social network members more generally to try and give up. Both Hazel and Dan, for example, adopted a variety of approaches with a view to persuading their mothers to quit. In Hazel's case, her primary strategy appeared to be making her mother aware of how inconvenient she found her smoking, pointing out that she not only found the smell of smoke particularly unpleasant "*And I smelt it off my mother and said 'You'll need to get your jacket washed' and she says 'Stop that!' I said 'I can't help it', I said 'but it's reeking, it reeks of smokes' "*, but that passive smoking was affecting her carbon monoxide readings at the clinic.

Hazel: And it only went up to one last week and I came out and gave my mother a row because it was her fault. I went "That's your passive smoking, that's your passive smoking". I says "It better not be 1 this week or else, you've had it. You'll be out in the back garden smoking."

Dan's approach, on the other hand, was somewhat different, instead looking to motivate and support his mother by suggesting that she try some of his NRT *"What I'll do is, I'll keep a box of the patches and the refills of that for the inhalators. You can try it for a week, that way you are not throwing more money away on another product. Try it and see how you get on"*, and by demonstrating that quitting was not completely unachievable.

Dan: I'm hoping it gives her some sort of incentive. If I can do it. Me and mother are really quite alike in things, in personality and stuff. I am hoping that that's what it does, and I'll try and encourage her as well. I'm not going to brow beat her, I wouldn't brow beat, that's somebody's individual choice. But give her the option anyway and try and make it glossy for her. See it as a wee reward, that it is quite easy. Because I think they do build it up into this big thing. It is "Oh you need a lot of will power for that. I've not got that." You are defeatist. So hopefully that will give her a wee bit of encouragement. Hopefully. If this idiot can do it, so can she.

Such attempts to encourage others to quit were additionally extended to more peripheral social network members, although here it appeared that the attempts were more opportunistic rather than orchestrated. For instance, when a work colleague mentioned that he wanted to give up but that his wife was a smoker, Lynn looked to empathise and reassure him that quitting was still possible, pointing out that she herself was in a similar situation *"Well, my husband still smokes and I'm trying to give it up. Trying to stop."* She also sought to provide more practical types of support, giving her colleague a small supply of NRT lozenges and lending him a book on quitting that she had picked up from the smoking cessation clinic *"I actually gave him a wee strip of the lozenges and I gave him the book"*; moreover, she shared a tip with him that she had picked up from a young couple in her stop smoking group.

Lynn: Maybe when the kids are wee and you've promised them a holiday and they'll start looking forward to it, that'll be incentive your to keep going. Because every

time you feel like having a cigarette, you'll go "Oh no, that wee guy's desperate to get to Florida. I couldn't do that to him."

In contrast to this very direct form of support, Hannah's approach was much more subtle and implicit, simply hoping that, as a result of her leading by example, her friend at work might eventually decide to quit as well.

Hannah: That's when I thought it was going to be a challenge when I worked with Lesley. When I gave up cos I hadn't worked with her for a week. She was off on holiday and when she came back I said to her that I'd stopped smoking. And she was going to give up but hasn't yet. Fingers crossed it might rub off.

Thus far, I have focused only on those strategies in which participants looked to reduce their contact with smokers through attempting to influence the smoking status of the people within their social networks. In an alternative approach, a small number of participants described how they had stopped seeing certain smokers altogether, thereby effectively removing them from their networks. Alex, for example, had ceased to meet up with his smoking buddies at work. He did not, however, appear to find this especially problematic as he saw these individuals as being somewhat marginal in his social network, with their primary point of social contact revolving around the sharing of a cigarette.

Alex: But the thing is, they are not great friends, they are just like "How are you doing?" "Good morning" "How is your day?" kind of thing. Nothing... you know what I mean? If they were good pals I wouldn't just see them when I was at the smoke shelters.

This contrasted with Sarah who had previously valued the opportunity to encounter new people at work through going outside to smoke; for her, therefore, the decision to not join them anymore was tinged with regret.

Sarah: I'm missing my smoking buddies, because the one thing I used to love about smoking here is you'd go

outside for a cigarette and you would meet more people in the university by being a smoker than you would otherwise. So you'd meet people from other departments, and I miss my smoking buddies.

While Alex and Sarah had stopped seeing these more peripheral members of their social networks, other participants described how quitting had also impacted on more significant relationships. In one case, it had led to less frequent contact with a particularly close family member. Hannah's daughter relies on her mother for adult company, as she is a single mother who spends a considerable amount of time alone looking after her two young children and is not in a position to return to work until they are old enough to attend nursery *"Hoping to start back to work but she finds it quite stressful, 24 hours a day in the house. You need adult conversation."* On most days, therefore, Hannah would visit her daughter and they would go outside to smoke in order to have a break from the children; quitting has caused a disruption to this routine, however, and Hannah explains that she has *"spent less time with my youngest daughter"* as a result.

Moreover, a second participant (Catriona) had gone further and was actively avoiding her friend, Walter. We have already seen (Section 6.2) how, in general, Catriona does not appear to have a problem being around people who are smoking *"Yes, but I don't mind being with smokers at all. I can stand with them now, I'm actually alright with the smell, you know? I don't mind it."* She, nevertheless, appears to exhibit a degree of ambivalence when explaining how smoking had formed an integral part of her relationship with Walter, and that visits to his house had provided the opportunity to relax with coffee, cigarettes and conversation. Furthermore, she seemed to feel that, by removing one of these elements, not only would she feel jealous if he was to continue to smoke but also that the purpose and value of these visits would be lost.

Catriona: Yes, he keeps saying "I'll need to come over". Yes I'll pop ... I will ... but it's not ... I'm not avoiding it, I just associate going to his house or my other friend, Teresa's house. But I've not been there for a while, but going there and because he lives alone and it's just peace and quiet, coffee, a fag and a blether. So it's like ... it's meaning to find another goal for that. But it all came as a...

Caroline: A package?

Catrina: A package, yes. So it's finding another... I suppose it's crazy, avoiding people because of ... it's not because they smoke because I don't mind but that's, yes. He doesn't go out much, he's a bit kind of ... he's agoraphobic so he doesn't go out. So it's not a case of, we could go out for the day or anything. He's kind of stuck in all day. No, but I'm not avoiding him. Well I suppose I am a wee bit ... avoiding the situation because it's ... and part of that ... you do you feel a wee bit jealous. That sounds crazy, eh? If they're there and they're sitting more relaxed than you are, but you don't want to do it, that's a strange feeling, eh? Something you don't really want to do because you know it's all these horrible things but you're still jealous that they're doing it.

7.2.2 Reducing exposure to smoking

Participants' actions were not, however, solely limited to reducing the numbers of smokers within their social networks. A second set of strategies, again adopted by the majority of participants, involved them in maintaining the same broad patterns of interactions with smoking family and friends as before their quit attempt, but instead looking to absent themselves from the specific situations in which smoking occurred. They, thus, sought to reduce their *exposure to the act of smoking* rather than to the smokers themselves. For many, the predominant form of action simply involved remaining indoors whilst others went outside to smoke, albeit the underlying motivations for such an approach appeared to be varied. For example, Heather explained that it had simply not occurred to her to accompany her sister-in-law outdoors *"Seen her this morning for a coffee but no, I never gave it a thought, only for a coffee so. I popped in this morning for a coffee, she went out for a cigarette but I was just sitting with my brother so..."* In contrast, Nadia was afraid that she might be tempted to smoke again herself if she joined her friend as she smoked at the backdoor *"I didn't want to come through and speak to her because I thought it was too tempting, so I just stayed through there and she come through."* For others, such as

Lynn, being able to stay inside was actually seen as one of the benefits of quitting *“Because part of it as well, is because I felt pretty stupid standing outside in the rain, do you know what I mean, and having a cigarette.”* Moreover, Lynn does not appear to feel that she is missing out by remaining indoors. Indeed, she seems to draw some satisfaction from the fact that it is the smokers who must leave *“Smoking, when you go out socially, they’ve got to go out, you’re not moving, they are, so you’re kind of...”*, perhaps reflecting a relief at no longer being one of those who is marginalised by being a smoker *“Socially it’s... you’re a bit of a leper being a smoker now.”*

Interestingly, there were no accounts of quitters removing themselves from situations in which family and friends were smoking, although there was one example in which the quitter and the smoker both went their separate ways. Lynn used to have lunch with a work friend every day and they would then go out for a cigarette; since her quit attempt, they have continued to meet but Lynn now returns to the office when her friend goes outside to smoke.

Lynn: We have our lunch and I’ve only ever had one cigarette at lunchtime. We used to go out, we go 12 to 1 lunch. We used to go out about 12.40 and have a cigarette. Sometimes she goes out and has a cigarette and comes back in or sometimes she goes out maybe about 12.50 and I just don’t see her after that. I’ll walk back to the office then, because the girl, Carol, that I share the office with goes away 1 to 2. So I just go back five minutes, ten minutes earlier. It doesn’t make any difference.

One common feature underpinning all these ‘absenting’ actions was the existence of a pre-established practice of smoking outdoors. In situations where smoking was allowed indoors, however, a somewhat different approach was required. Here, participants could not simply stay put when others went outside, but instead needed to apply more active strategies in attempting to minimise their exposure to smoking. Hence, they sought to establish new rules regarding when and where smoking was permitted; it is, perhaps, unsurprising that these restrictions almost exclusively applied to the quitters’ own homes. Colette, for example, prevented her sons from smoking in the house *“Take that out of my house, you’re not smoking in my house, that’s disgusting.”* Similarly, Alex stressed that, although he would not tell visitors that they

could not smoke at all (as he did not wish to become an extreme anti-smoker), they would be asked to go into the back garden if they wanted a cigarette.

Alex: But as I say, Paula's mum smokes, she smokes like a chimney. And her brother smokes, but he's not really been here since we've stopped smoking. It doesn't bother me, I will just say "Go out the back if you want to have a fag. Go out the back and have a cigarette." I am not going to say "This is a no smoking joint." I'll say "If you want to go out and have a cigarette, you can have one." I'm not going to be like this changed anti-smoking, with a big banner and that. I wouldn't do it anyway, because I know if you want to smoke, you smoke. It is entirely up to yourself. But they will be smoking out the back.

There were, nevertheless, some circumstances in which participants felt that it was not possible to impose a complete ban on smoking in their homes, and instead looked to identify a designated smoking room. For instance, while Hazel no longer permitted most people to smoke indoors, she would occasionally allow her elderly mother, who is in poor health, to smoke in the kitchen if the weather was bad "*I don't let her smoke in my house. Unless it's really... I said to her 'If it's really cold, you can go in the kitchen and shut the door', I says 'but spray the place after it.'*" Colette, on the other hand, sometimes sees hairdressing clients at home and (in stark contrast to what she told her sons) she would almost insist that they smoke in the kitchen, a response that may well have been born of a need to maintain good relationships with her customers.

Colette: I done hair, my pal, Denise, I've known her from when we were children but they come in and they're smokers. And the first the thing she did she went "Oh no, I'll go outside, I'll go out the back and have a fag" and they went out the back and had the fag. And I felt terrible. I said "Go in the kitchen, it's not even been decorated yet, just go in the kitchen, I've not finished with that yet". But she said "Oh no" but I made them the second time.

These difficulties became more apparent, though, in those cases where the participant's household contained other smokers, meaning that they had to work harder at avoiding being exposed to smoking. When Lynn, for example, found her husband smoking in the kitchen on the first morning of her quit attempt, she made her displeasure clear *"I don't believe after all we've said that you could do this to me. I'm really, really pissed at you Mark"*, as a result of which he went outside to smoke *"He went 'Oh right, well I'll go outside then.' And he got up and he went away outside."* Whilst he was careful not to smoke in front of her again, Lynn was still nevertheless dissatisfied by the fact that he continued to smoke in the house, and has contemplated banning him from smoking indoors completely. Moreover, it was also evident that his refusal to quit was an ongoing source of tension between them, as illustrated both by her pointed remarks about the smell when he came back into the room after smoking elsewhere, and by an exchange between them at the end of the follow-up interview, where Lynn suggested that he should consider giving up as well.

Caroline: So does he still smoke in the kitchen, at the breakfast bar?

Lynn: Yes, but not in front of me.

Caroline: OK, yes.

Lynn: Not in front of me. He'll go outside and have one or he'll go upstairs to the bedroom, but I can still smell it in the bedroom.

Caroline: Yes.

Lynn: But I'm loathe to throw him out in the rain, but maybe I should. But he won't smoke in the same room. Definitely not. If I'm maybe, ironing next door and he'll come through to get a cigarette, he'll say "Oh, you're in here." Well, of course I'm in here. "I'll just go upstairs." So, no, he doesn't smoke in front of me.

While earlier in the interview:

Lynn: Sometimes Mark when he comes into the room, he's maybe been next door and had a cigarette and he'll come in. And I'll go "Oh God, you've just had a

cigarette, I can smell it off, you're stinking."

And then in the follow-up interview:¹

Mark: Lindsay [Lynn's best friend] doesn't smoke. I'm your man and I smoke, but I try to put... if you appear in the house, in the kitchen where I smoke, I try and put it out. She goes away and gets washed for her work and I'll light up again.

Lynn: He wants a brownie point, eh? Maybe he should say "I'm going to stop smoking, because you have".

Mark: Now don't go down that road.

In contrast to these wide-ranging attempts to establish new rules around when and where smoking was allowed in their own homes, participants were much less able to exercise such agency in other environments. We have already seen, for example, that Colette had banned her sons from smoking at her house; however, she anticipated that, if she were to call on them, they would continue to smoke in front of her and she did not appear to consider requesting that they do otherwise "*But if I was to go down to any of their houses, they'd probably just light up anyway.*" Across all the participants, only one had sought to influence the rules on smoking within family and friends' homes. Here, on visits to her parents' house, Hazel did have some success in persuading her mother not to smoke in her presence. This case was, however, unusual in the considerable amount of time that Hazel spent in their home, perhaps giving her a greater sense that she could legitimately have an input into the household rules on smoking.

Hazel: My mum had had a bad fall and she just stays round the corner, and she'd had a bad fall. I was up there from morning till night time and of course ... and with her passive smoking my reading went up to one. So I fair gave her some ... "I hope you're pleased with yourself. But through passive smoking this week my reading is at one. It was zero last week when I wasn't

¹Although I interviewed Lynn on her own, her husband joined us towards the end of the session because their son was using the kitchen

around you 24/7. Please think on that every time you light up a cigarette, you're damaging my lungs even though I'm trying to stop smoking." "Oh, OK, OK."

Caroline: So has she, stopped around you?

Hazel: She's not too bad. She's not too bad. She's sort of cut it out and I've seen her like lighting it and going away through to the kitchen or something like that, eh. And I thought "Right, OK."

7.2.3 Increasing social support

Thus far, we have seen that quitters attempted to modify the structure of their social networks both by looking to influence the smoking status of network members, and by reducing the frequency with which they are in the direct presence of family and friends as they smoke. Their attempts to alter their social networks did not, however, stop there. Rather, quitters also sought to bring about changes in the functional qualities of their networks, and specifically in the level and nature of the *social support* that they received from network members. Much of the (quantitative) research literature outlined in Chapter 2 and Chapter 3 tends to portray quitters as being in passive receipt of social support; any reference to a more active role is limited to an acknowledgement that quitters' *perceptions* of the social support received may differ substantially from those of the person giving the support. Participants in the current study, however, demonstrated a desire for a much greater degree of control, seeking to engage with family and friends in order to help them better tailor their supportive actions towards the needs of the quitter. Furthermore, in Chapter 6, I outlined a framework for understanding how quitters attach meaning to the actions of their social networks and, within this, I identified a number of key ways in which the more generalised, support-related (i.e. not specifically smoking-related) behaviours of family and friends were characterised, namely practical support, empathetic responses and verbal feedback. Perhaps unsurprisingly, this framework also has some utility in advancing our understanding of how quitters' actively attempt to shape network function.

Most commonly, here, participants' strategies centred around guiding social network members towards providing specific forms of practical support. This was particularly

apparent in the case of Hazel, who was seen to nudge both her son and her mother in the right direction. First, having tried out an e-cigarette in the shopping centre close to her son's work, she later went back to the shop with him and pointed out the e-cigarette, saying that she thought it might be quite helpful *"This is quite good, the girl let me try it"*, in turn prompting her son to offer to buy it for her as a present *"Well look we haven't got you anything for your Christmas so, if you really are determined to do it, we'll buy you the kit."* She, therefore, looked to her son for help in managing the cravings associated with nicotine withdrawal, through the provision of equipment that she could not otherwise have afforded. In contrast, she sought to cast her mother in the role of gate-keeper, suggesting that, the next time she mentioned feeling tempted to have a cigarette, her mother should try to dissuade her by emphasising how much progress she had made.

Hazel: Because mum said "If you really, really want one you can have one" and I says to her "But you're not supposed to say that to me, you're supposed to say to me 'Hazel, you've been on these patches for three weeks, do you really want to undo all that good work by having a cigarette?'" "Oh right" she says "I'll remember that the next time."

For others, though, the process of eliciting increased practical support was more implicit, embedded as it was within a joint quit attempt with another social network member. In such cases, the very act of trying to stop with someone else led quitters to develop patterns of behaviour that were mutually supportive. Paula and Alex, for example, describe encouraging and praising each other in order to help maintain their motivation *"So, as I say, we just encourage each other by saying 'Well that's X amount of days.' You know what I mean? Just to pat each other on the back, kind of thing."* For Nadia and Heather, however, it was more about finding new ways of keeping occupied so as to distract themselves from thoughts about smoking.

Nadia: And we've started going to - my mum [Heather] come to vibroplate things with me as well so that's a wee, the kind of nightly thing. And we would've had a cigarette and that. We go away to that and then by the time you've done that you've got more energy, you're feeling better and you've forgotten about smoking.

Moreover, joint stop smoking attempts also provided the type of supportive space in which quitters could empathise with each other, sharing moments when they were struggling.

Colette: Just last week, was it last week? I went you know I could go a fag and he [her partner] went I'm the same. I felt quite low, I felt really down, Saturday. And I felt really low and I could have quite easily have just went and got a packet of fags because I wanted. And I thought "No, it's not worth it after four weeks." Four weeks is the longest I've been. So I don't know if that's anything to do with it or not, I don't know. I really felt I needed one and so did he. He said he felt down and could go a fag.

Conversely, there was only minimal evidence that participants explicitly sought verbal feedback from social network members. This does not mean, however, that they would not have welcomed such feedback, as we can see from Hannah's disappointment at the lack of verbal support from her mother "*My mum, not so. I thought she might have been but she was alright at the beginning but it seems to have tailed off for some reason. I don't know why*", but rather that they did not appear to actively solicit it. The sole example in which a participant did seek to influence the degree of feedback they received was in fact related to a situation in which a family member was thought to be mentioning the quit excessively; here Lynn, somewhat unsuccessfully it seems, attempted to make clear to her mother that she would prefer to try and forget about smoking altogether.

Lynn: My mum? Now and again she brings it up. But initially in the beginning she was mentioning it all the time. I think she wanted to know all the time and "Are you sure this time?" and that. I used to say "I really don't want to talk about it." And then she'd say the next time I'd see her "I'm frightened to ask you", you know that way, she was going to ask you, but she put that wee dig in first.

7.3 The internal psychological world

Having discussed the ways in which participants attempted to modify their social networks (both structure and function) with the aim of making quitting more straightforward and less stressful, I shall next consider how they looked to incorporate aspects of these external social relationships into their internal psychological worlds. There is already much research illustrating the impact of various psychological factors on quit outcomes with, for example, stress levels (Fisher et al., 1993) and self-efficacy (Ockene et al., 2000) both being linked to cessation rates. Moreover, social cognition models of health behaviours recognise the importance of an individual's understanding of their social world in shaping their behaviours (Ogden, 2004). The theory of planned behaviour (Ajzen, 1985), for example, incorporates the concepts of *subjective norms*, or an individual's perception of the extent of social pressure to adopt a particular behaviour, and *perceived behavioural control*, which reflects an individual's assessment of the likely obstacles (both internal and external) to be faced. Within this view, therefore, individuals are seen as possessing fixed, internalised representations of their external social worlds that provide the backdrop to their behavioural patterns, but no consideration is given to how they themselves might respond to the advantages or challenges that their networks provide. The health action process approach (Schwarzer, 1992) does, however, go some way to addressing this issue by acknowledging the role of *volitional processes* in which individuals devise strategies for dealing with the anticipated responses of their family and friends. This model still, though, positions individuals as being solely reactive in relation to their networks, and does not view them as actively utilising, or building upon, the resources that emanate from their social worlds in order to enhance their own personal resources. This is, perhaps, somewhat at odds with the accounts given by participants in this study, which highlight the ways in which they sought to strengthen their own internal psychological worlds, both by drawing upon the experiences of others and by devising pre-emptive strategies, and it is this to which I shall now turn.

7.3.1 Maintaining motivation

Participants adopted a range of strategies in looking to utilise their relationships with family and friends as a form of internal, personal resource. These strategies fell into two main categories, the first of which involved using social networks as a focus

around which to maintain motivation as the quit attempt proceeded. While previous research has highlighted that quitters often cite social network-related reasons for giving up smoking (Baha and Le Faou, 2010), the current study suggests that they also seek draw on their networks in order to help maintain their determination to stop. For many participants, this stemmed from a desire not to let down family and friends. Whenever Paula felt tempted to smoke, for example, she would remind herself that her young children were concerned about the health effects of smoking *“But when you have got that idea, your kids thinking that you are going to die, it sort of helps you on”*, and that she had made a ‘pinkie promise’ with her son (by linking together their little fingers) that she would quit *“I just keep saying ‘I’m doing it for the kids.’ I did a pinkie promise with my little boy, so I can’t break that.”* In Heather’s case, however, she was more concerned about luring her daughter (Nadia), and quit companion, back into smoking if she were to relapse.

Heather: But this time it’s different because I’m not wanting to let Nadia down and Nadia’s not wanting to... To be honest with you, if Nadia starts smoking I will probably fall by the wayside, or vice versa. So we’re helping each other through this.

In stark contrast, there was one participant who was driven not by a desire to avoid disappointing her family and friends, but rather by having been disappointed at their reaction. While abroad on a holiday a short while before she quit, Lynn mentioned to her husband, Mark, that she was planning to stop and was not, therefore, going to take any cigarettes back with her. In response, he suggested that this was not a good idea as, based on past experience, it was unlikely that she would succeed. Lynn took this to mean that Mark wanted her to fail and, in her anger and frustration, was able to turn it around and use it as a source of added motivation when she felt particularly tempted.

Lynn: Well, actually, what he said to me on holiday was, the second holiday, the wee week that we had in September, he said “You’ll need to buy cigarettes, Lynn, you can’t go back with none.” He says “You know, you’re not going to manage this anyway because you’ve tried it a few times before.” Well do you know, when I’ve felt like having one, these words

have come back to me and actually they've been the best thing; the biggest help. To try and prove him wrong. I thought "Bugger you, I'm going to show you that I'm going to manage it this time."

And then later in the interview:

Lynn: And I thought, he wants me to fail. But that was really, that best bit of advice was him telling me, in his own way "Just buy them because you're going to fail anyway." And that, when I really feel like a cigarette, that's what comes to my mind. That's keeping me ticking on, I go "No, no, no, I'm not going to have one because that's what he's expecting. I going to show him."

In other cases, the motivation to remain quit seemed to derive more from comparisons made, both favourable and unfavourable, with fellow quitters. Some, for instance, were somewhat judgemental about the failures of other people at their stop smoking clinics, even appearing to draw strength from the knowledge that they were making better progress. For Lynn, her disapproval of one young woman was rooted in a sense that she simply was not trying sufficiently hard and that she was, therefore, letting everybody else down "*Oh Christ, you have another ten pack – what are you just playing at it. I wouldn't have had the patience to be like Frances [stop smoking advisor] and say 'Oh well, you know, this just wasn't your week and...' I thought, you know, this girl kept, still trying but obviously still buying... so I didn't feel she was giving it 100%.*" For Douglas, though, his disapproval was more related to his suspicions that a woman at his clinic, who ascribed her high carbon monoxide reading to passive smoking, was in fact lying.

Douglas: This lassie said "I've not had a fag, I've just been at my pal's house" and I think she was quite high up in the ruler. And I thought well you know, if you've not smoked, how can you... well she said if you are sitting in the same room and this guy was quite a heavy smoker so it's on their clothes and she's obviously breathing it in as well. Well I'm thinking, it wouldn't

be very high, but I suppose with passive smoking you can be. Maybe not as high as but we all thought she's telling porkies.

Comparisons with other quitters were not, however, always as reassuring, with a number of participants making reference to social network members for whom stopping smoking had looked to be very straightforward. In such cases, there was almost a sense that the need to match up to these individuals gave a powerful incentive to remain quit. While Sarah, for example, seemed to believe that her husband had more will power than her *"That's what I mean, once he's put his mind to something, which I don't think I'm quite as good as he is"*, she nevertheless thought that he was providing a good example *"There's something about that guy - he's a very good role model anyway."* The situation was, perhaps, slightly more equivocal for Lynn, who described being very impressed by the progress of a young couple (Paula and Alex) at her smoking cessation clinic, but at the same time felt it necessary to justify why she was struggling to a greater degree.

Lynn: I think it would have been nice to bump into that couple that I met and just see how they were doing, because they were doing really good. She better, well, maybe not better than him because he was doing good as well, but she was taking to it like a duck to bloody water.

Caroline: Yes.

Lynn: But then she's younger than me and hasn't smoked as long. Maybe I've got more of an addictive personality than her, I don't know.

7.3.2 Building knowledge

I will move now to explore the second set of internalisation strategies by which quitters looked to make use of the social network resources available to them. Here, however, rather than looking to family and friends for the motivation to remain abstinent, participants instead sought to build their repertoire of knowledge with respect to quitting by drawing upon the experiences of others. Moreover, the element

of sharing that is inherent in such strategies appears to be key in ensuring that the quitter does not feel alone; a number of participants like Lynn, for example, discovered that many of the people they know were in fact former smokers *"I've mentioned it to people and say 'Oh, I've stopped as well ten years ago.' Or 'Five years ago.' Do you know what, there's a lot of people that have stopped smoking now."* From there, knowledge acquisition falls into two main types: that relating to the process of quitting, and that relating to smoking cessation products.

In terms of the quit process, participants sought both a greater understanding of what the initial stages of giving up smoking might entail, as well as an awareness of what they might expect further down the line. Thus, from her various discussions with network members, Sarah had begun to appreciate the commonality of hyperactivity associated with nicotine withdrawal *"We were comparing notes and it was quite funny. He [a work colleague] said 'I'm cleaning more now' and I just burst out laughing and said 'I know exactly what you mean' "* but had also come to realise that this excess of nervous energy would eventually recede *"But he's [her husband] definitely calmed down. When he first gave up, my God, hyper! He was washing this, he was doing this, he was running up and down the stairs and he was moving this, and he was moving that and he was doing this and that. So that's gone, he's not..."* It is interesting to note that these two examples involved somewhat different modes of information gathering, namely opportunistic discussion with a work associate in the first case, and close observation of her husband (who had given up a few months before her) in the latter.

The knowledge that nicotine cravings would eventually begin to diminish was, similarly, picked up by Dan who noticed that the longer-term quitters at his stop smoking clinic had started to refuse NRT patches *"And every week it passes, it's easier and easier. The same ones that were in for our first week, they were in for their 6th week. They were asking if they wanted patches, and most of them were 'No, you are OK,' sort of thing. So that is that."* This was, however, in stark contrast to Nadia who, in recalling the experience of her auntie, was acutely aware that quitting could sometimes be considerably more problematic.

Nadia: She went through a really tough time. She was at the doctors all the time, like, roaring and greeting, she was having panic attacks. She really didn't take it well at all. She told us about the clinic. But the fact that

she'd done it and she'd still stopped, me and my mum, we were kind of like "Well if my Auntie Maira can do it, we can do it." But, touch wood, we've had a, definitely better time than her because she was like, really struggling. And even if you speak to her about cigarettes, even now, she looks like she's ready to start crying. She totally, aye, totally misses it.

Although the vast majority of accounts gathered by participants about the initial stages of quitting were viewed as being reassuring (although not, as we have seen, in the case of Nadia's auntie), knowledge exchange with respect to the longer term tended to be more cautionary. Here, participants had encountered numerous stories regarding the need to be ever-vigilant, with former smokers typically warning that, despite becoming less frequent, there would always be occasions when they felt the need for a cigarette.

Hazel: She [Hazel's friend] says "To be honest, sometimes when I'm so highly strung and in an awful of pain [from her knee], I think about it, but I don't do it, because I think to myself you'll have to start again from scratch and do all this again". She says "So", she says "And it does pass and the feelings... the craving for a cigarette gets very few and far between."

Whilst most past smokers had managed to resist such feelings, this was not always the outcome; indeed, Catriona described how her sister had started smoking again for no particular reason on a night out, despite having been stopped for ten years.

Catriona: Yes, she was so ... and then all of a sudden she had a cigarette, one night we were out and ...

Caroline: Oh right and not for a particular ... it was just on a night out, right OK.

Catriona: And that was her back on them.

Turning finally to knowledge building strategies around smoking cessation products, it is perhaps surprising that here the focus was primarily on the problems associated

with such products, rather than on the sharing of information about which were effective. Stories around the side-effects associated with different medications were, in particular, very common. In some cases, these problems were understood to be relatively minor. Alex, for example, appeared to find reassurance in the fact that a woman at the stop smoking clinic had also mentioned having nightmares while on NRT patches.

Alex: One of the wifeys that was there, she said that too, that the patches were making her go crazy. Crazy dreams and that she was saying, nightmares. I was like... So I was saying, I says that to her, I said "That's funny, I put the patch on and I couldn't get a wink of sleep. I couldn't get to sleep."

In other cases, however, participants had become aware of much more serious issues; Douglas, for example, described how his son-in-law had experienced severe mental health problems while on varenicline *"Now my son-in-law was on that and my daughter said he was actually going absolutely mental. Because in some cases people commit suicide and she said he was really bad. He had actually to go to the doctor and they said right stop it."* Moreover, a number of participants had decided to make changes to their medication in light of these accounts, sometimes deciding like Angus to come off varenicline altogether *"And it was good that way because she could explain just how I felt and what she went through herself. And that was when I decided, right, I am coming off them, I want to try something else."*, and sometimes being encouraged by the success of others into requesting a lower dose from their GP.

Sarah: So the fact that Graeme [Sarah's husband] had managed that, when I went back I said "Look, I'm only just over six stone and I just think this is too high a dosage for me. And last time I was on it I burst into tears when I woke up blah, blah, blah. Could I go onto [varenicline] but can I go on a lower dosage?" He said "That sounds sensible."

7.3.3 Protecting the self

Reflecting back on the above strategies of maintaining motivation and building knowledge, we can see that both these approaches are essentially positive, in that they seek to develop the quitter's personal resources by drawing on the experiences of family and friends. Participants did not, however, only view their networks as a potential resource. In the first half of this chapter, we saw that quitters take a wide range of steps aimed at minimising the extent to which they come into contact with smoking, aiming to protect themselves against the temptations inherent in such exposures. Beyond this, though, there was also evidence that participants adopted a number of other more generalised, internalised self-protection strategies.

Here, the most common strategies involved not informing family and friends that they were giving up smoking. For some, this appeared to be rooted in an awareness that the quit attempt might fail. Dan, for example, did not initially tell his mother that he was trying to stop because he felt that such declarations were easy to make but often did not signal serious intent *"I don't think there was any point in telling her I am going to chuck it, because how many times have we heard that off people? We've all done it"*, perhaps reflecting his own early scepticism about his ability to quit (see Section 7.2.1). Furthermore, whilst Lynn was absolutely determined to succeed on this occasion, she was still concerned that others might be judgemental if she did relapse *"But no, I've kind of, I've not said a lot about it. I think I've been frightened that if I did go back on it, they'll say 'Oh, there she goes again' Because you feel a bit of a failure when you think 'Other people can manage it, what's wrong with me that I can't?' "* This decision was not, though, without its consequences as it meant that she was not able to share how she was feeling with others; for her, therefore, being able to discuss her experiences with fellow quitters at the stop smoking clinic almost seemed to be a relief.

Lynn: She [stop smoking advisor] was more in to, how are we feeling at that particular time and just... I just found it quite helpful to go... maybe because I hadn't really mentioned it to many other people. It was like, it was kind of out in the open with them.

In contrast, Douglas had opted not to mention his quit attempt to friends for fear that they might encourage him to start smoking again *"No, I've not told the neighbours or*

Fergus and that. You know they would probably try to get me smoking again."

Moreover, in a slight variation of this strategy of keeping quiet, other participants had informed social network members that they were quitting but preferred not to talk about it any further as they wanted to put smoking completely out of their minds.

Sarah: Now I'm not smoking I don't ask him [her husband],
because I don't actually want to think about fags. And
apart from you, I don't want to talk about them
because that's like, if you don't talk about it and don't
think about it, it's a lot easier.

A somewhat different, and indeed less common, set of self-protection strategies involved participants in attempting to keep their expectations of family and friends to a minimum, instead looking to be realistic about the levels of interest and support that they were likely to receive. Thus, in the case of Douglas, he defended his friends for not noticing that he had given up, explaining that they were busy with their own lives *"Well, no they haven't but I don't know, because everyone's wrapped up in their own life. And going up to do that horse [put a bet on] and, you know, I can't stop Dougie."* Dan, on the other hand, accepted that others in his social network would not stop smoking simply because he was quitting, but nevertheless he felt that it was not unreasonable to expect them to refrain from smoking in his presence.

Dan: I think they should show a wee bit of consideration.
I'm not asking them to change their life just for you.
The whole world doesn't stop because you've stopped
smoking. But a wee bit of consideration, I think, is
common courtesy.

Different again were those actions that sought to ensure a calm environment during the initial phases of quitting. In common with strategies aimed at reducing contact with smoking, these actions also involved attempts to manipulate the external surroundings in order to provide an environment which was more conducive to achieving the relaxed and unhindered mental state necessary for stopping. Again, this was a strategy adopted by Douglas, who reported waiting until his wife was away before giving up so as to be able to avoid the stresses and irritations of his normal life *"So at that time I thought, right, I'll not have you nagging me. She goes away for a week at a time and I thought, peace and quiet, just me my two dogs. And I'll try it*

now.” Sarah, likewise, felt the need to remove herself from these everyday stresses, although in her case she decided to quit whilst she was away on holiday.

Sarah: On the Saturday evening I’d one cigarette left in the packet and we were due to fly out the next day. I think it was about 3 o’clock in the afternoon, I smoked that cigarette and I turned round to Graeme [her husband] and said “Right that’s it.” And what I was thinking of, it’s a change of a pattern. If I can’t do it when I’m on holiday, I’ll never do it. So the decision was made before we went away. So I’ve had four weeks in the Canaries without a cigarette and I’ve had one week at home and I’m still not smoking.

7.4 Summary

This chapter has explored the centrality of quitter agency in finding ways of navigating social networks while attempting to stop smoking. It has drawn, moreover, on the conceptual models of House et al. (1988b), who introduced the notions of network structure and function to the field of social network studies in health, and Berkman et al. (2000), who articulated a framework in which these separate network components were seen as impacting on health through, in part, a range of psychological processes. Two main analytical threads were identified, with quitters being seen both to try and shape their interactions with family and friends, and to strengthen their own internal resources by building upon the experiences of, and protecting themselves against, social network members.

Quitters adopted a number of different strategies in seeking to manage their external worlds, looking to alter the structural, as well as the functional, composition of their social networks. In relation to structure, attempts to reduce contact with smokers were particularly commonplace; participants described trying to enlist family and friends in quitting alongside them, encouraging smokers towards giving up at some point in the future and, on occasion, avoiding network members who continued to smoke, thereby effectively removing them from their networks. Equally prevalent were attempts to reduce exposure to smoking, with quitters looking to absent themselves from

situations in which smoking occurred, and to establish new rules around when and where smoking was permissible. Thus, strategies aimed at modifying network structure were concerned either with changing the balance of smokers in the network or with changing the frequency of exposure to the act of smoking. In contrast, strategies aimed at the more functional aspects of the network were focused on shaping the level and nature of social support. Here, participants were seen to try and guide family and friends towards providing those forms of practical support that they felt were better suited to their needs.

Psychological models of health behaviour change tend to position the individual as being largely passive, or at best reactive, with respect to their social networks. The participants in this study, however, appeared to take a much more active role in making use of, and building upon, the resources that flowed from their networks. Family and friends served, in particular, as a source of motivation for maintaining the quit attempt, with participants variously voicing a determination not to let social network members down (especially where they were trying to give up alongside the participant), being spurred on by expressions of doubt and negativity, as well as comparing themselves, both favourably and unfavourably, to other quitters. Participants also drew, moreover, on the experiences of others in order to develop their own repertoire of knowledge regarding the quit process and the problems associated with the range of available smoking cessation products. In a somewhat different vein, participants were also seen to adopt strategies that were aimed at cushioning themselves from stressful social environments, a lack of interest amongst social networks members, and fears of being judged and criticised if they were to fail.

CHAPTER 8

Changes in quit interactions

8.1 Introduction

In this, the fourth and final of the results chapters, I shall turn to the longitudinal element of this study and explore how participants' social interactions changed over the initial few months of their quit attempt. As with each of the previous chapters, I shall be guided by the broad theoretical framework provided by the social networks in health perspective. Alongside this, I shall additionally draw upon psychological theory that has sought to explain the process of health behaviour change in individuals. In particular, the stages of change model (Prochaska et al., 1992) emphasises the cyclical nature of behaviour change, and identifies five stages (pre-contemplation, contemplation, preparation, action and maintenance) through which people move backwards and forwards as they seek to change their behaviour on a permanent basis. Crucially in this view, it is recognised that individuals may relapse and return to an earlier stage. Whilst the purpose of the current study is not to explore in detail the stages through which quitters transition, the stages of change model does, nevertheless, provide a useful heuristic device around which to structure my analysis. Furthermore, the broad supposition that behaviour change involves the movement between various different stages, is one that I venture can equally apply to the social interactions that surround attempts to modify behaviour.

Thus, my analysis reflects both the fact that the quitter and their social networks will continually adapt and respond to each other as the quit progresses, and the fact that the nature of this adjustment will vary according to where on the cycle of behavioural change the quitter is situated. More specifically, I shall begin in *The journey to becoming a non-smoker* (Section 8.2) by focusing on the gradual shift from the action stage to the maintenance stage of change, exploring how the behaviour of participants (Section 8.2.1) and their social networks (Section 8.2.2) evolves as the quit attempt becomes more established. I shall then turn, in the second half of the chapter, to the reverse process *The journey back to being a smoker* (Section 8.3), which encompasses not only the circumstances and causes of relapse (Section 8.3.1) but also the renegotiation of their renewed smoking status (Section 8.3.2).

In focusing on changes in quit interactions, this chapter draws primarily on the follow-up interviews and, as a result, the analysis is limited to those nine participants who met with me on a second occasion (Figure 8.1). Moreover, the latter half of the chapter on the journey back to being a smoker will be further restricted to those four participants who relapsed after a period of complete abstinence. Angus will not, however, be included in this concluding analysis as he never managed to quit completely.

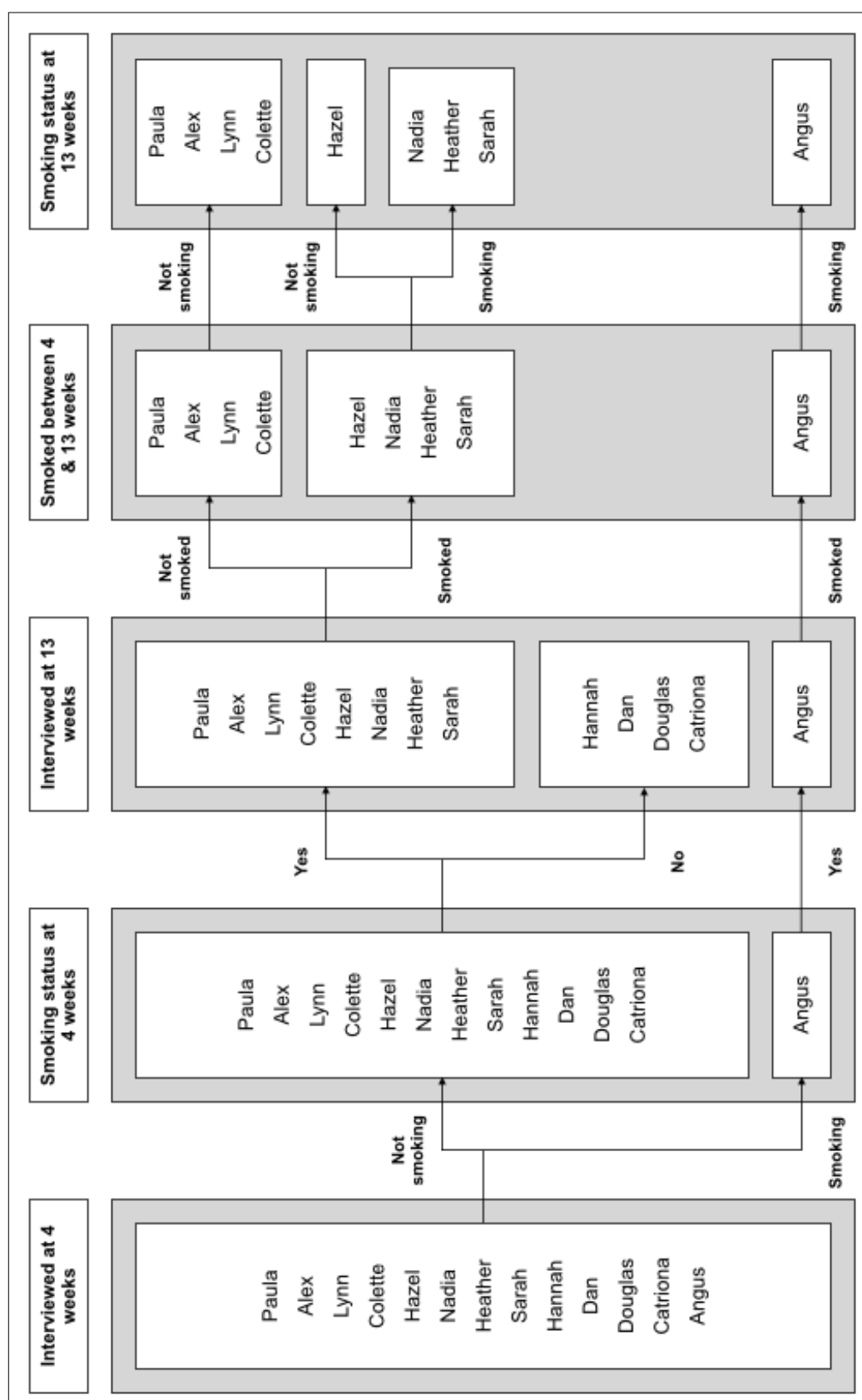


Figure 8.1: The status of participants over the course of the study

8.2 The journey to becoming a non-smoker

8.2.1 Shifting behaviours: the quitter

I begin then by exploring the transitions that participants make as they move from the action stage of behaviour change, in which abstinence is especially effortful, through to the maintenance stage, in which not smoking has almost become second nature (Prochaska et al., 1992). In their study of identity change during the process of smoking cessation, Vangeli and West (2012) found that quitters move slowly towards a *non-smoker* identity, passing through the intermediate identities of *team stop-smoker* (a collective identity formed with other people quitting at the same time, whether they be family and friends or previously unknown members of the stop smoking group) and *ex-smoker*. A similar process of gradual change was seen here, with participants incrementally shifting their behaviour towards that of a non-smoker. This manifested itself, in the immediate days after the quit, as a general wariness about being around smokers, for fear that they might be tempted to have a cigarette themselves.

Hazel: And try not to associate yourself with too many smokers when you are trying to stop because the first two or three weeks when you smell it, you really do crave.

As the nicotine cravings began to subside, however, then so did this sense of wariness. In Alex's case, for example, this appeared to happen relatively rapidly; although he had initially been tempted by other people's smoking on several occasions, this seemed to have become much less of a problem by the time of the four-week interview "*It's getting easier but... there's nothing that I really... maybe a few times I've seen somebody smoking, I've maybe thought... but now.*" For Lynn, though, this process of re-adjustment was far from linear, and she instead described how her reaction to smokers varied wildly from one moment to the next, sometimes finding the smell of their cigarette smoke appealing and sometimes finding it repulsive.

Lynn: I've got to be honest with you, even I can't make up my mind. Sometimes I like the smell. Sometimes when he [her husband] comes in, you know, I'd say "Come here, let me have a smell." And other times it's

“Get away, you make me feel sick.” He doesn’t know what he’s doing with me, because I don’t know from day to day what I’m doing myself. You know, I kind of change a bit like the weather.

This increasing sensitivity towards cigarette smoke was, moreover, widespread amongst participants and, across the board, concerns about being tempted back to smoking were gradually replaced by a developing dislike of the smell, possibly reflecting a growing separation from the smoker identity. In some cases, participants simply described becoming more aware of the smell, with Alex starting to notice it on the smokers themselves *“You walk by people, and they will maybe not be smoking, but you can still smell the smoke off them”*, and Hazel becoming acutely conscious of the smell in her mother’s home *“But my mum’s, you smell it as soon as you walk in the door.”* In other cases, however, participants attached more evaluative assessments to their observations; Colette, for example, stressed how unpleasant she now found the smell to be *“I find the smell of somebody that smokes, you can smell somebody that smokes, for want of a better word. They were reeking.”* Indeed, several participants were overtly censorious: Lynn, for instance, was very vocal in expressing her disgust at the smell when her husband came back in after having a smoke *“Oh God, you’ve just had a cigarette, I can smell it off, you’re stinking”*, while Hazel went a step further urging her mother to wash her jacket in order to get rid of the smell.

Hazel: And I smelt it off my mother and said “You’ll need to get your jacket washed”, and she says “Stop that!” I said “I can’t help it”, I said “but it’s reeking, it reeks of smokes.”

This willingness to be openly disapproving was, however, rare and may indeed have been motivated, in each of the above cases, by a underlying desire to see their family members quit as well. Alex, in contrast, sought to mitigate his negative reaction towards a smoker in the street, by pointing to the physical effects that tobacco smoke now had on him and his partner *“Because there was a guy that was smoking a big cigar, me and Paula both walked by and we both sneezed at the exact same time, from the smoke.”* Interestingly though, participants did not limit such criticisms to other people, instead acknowledging that they too had similarly been guilty of deceiving themselves about the extent of the smell.

Lynn: But I never smelt it off me when I was a smoker. I don't think you ever do. I thought what a waste of time putting that lovely perfume on when all you can smell is nicotine.

Further still into the quit, participants began to appear more at ease in a non-smoking environment, suggesting perhaps that their widening sense of dissociation from the identity of smoker was being mirrored by a developing sense of attachment to the identity of non-smoker. While examples here were less common, reflecting the fact that relatively few participants remained quit by the time of the thirteen-week interview, there was still nevertheless evidence of such a shift among a small number of participants. For instance, on a recent night out, it had suddenly occurred to Lynn that she was among a group of completely non-smoking friends and she seemed to derive some pride and satisfaction from this realisation *"There was six of us and there were no smokers. So had I been smoking I would... see that would fleetingly go through my mind. I'd say 'Oh, nobody here smokes'. So you do think about it and it wasn't a problem."*

In several other cases, the transition was even more pronounced and this growing sense of confidence in the non-smoking identity was seen to carry across into participants' interactions with continuing smokers. During a family gathering a few months into her quit, for example, Paula's sister-in-law had unwittingly gone to offer her a cigarette but Paula had immediately, and without fuss, replied that she was a non-smoker *"It's quite strange because one of my sister-in-laws, I had not seen her for a while, and she went to offer me a cigarette and I was like 'I don't smoke.' It is one of those things, you know what I mean?"* Here, Paula's increasing confidence appears to be particularly underlined by her decision to assert that she does not smoke as opposed to describing herself as a quitter. Nadia, moreover, had gone further: despite her initial concerns that being in direct contact with smokers would be *"too tempting"*, she had briefly reached the stage (albeit only when she was still using NRT patches) where she was able to accompany her friend when she went outside to smoke.

Nadia: Aye, that was absolutely fine, that didn't bother me in the slightest. And one of the ... there was only one girl that smoked so a couple of times I actually went out with her just to keep her company.

Caroline: Oh right, OK. Is that Laura?

Nadia: Aye. But it still didn't bother me. I was fine. I was neither up nor down.

Certain participants did, however, express a reluctance towards assuming the non-smoker identity in its entirety, repeatedly emphasising their determination to avoid those strong anti-smoking behaviours that they typically associated with ex-smokers.

Lynn: But I don't want to turn into one of these people that, you know, the ones that, the reformed smokers...

Caroline: Yes.

Lynn: They can be worse than the ones that have never, ever smoked.

Caroline: Yes.

Lynn: And I really don't want to start pushing all these things down folk's throats.

The motivations for this reluctance were varied; while Alex, for instance, strongly believed that smoking was very much a personal choice *"Because I know if you want to smoke, you smoke. It is entirely up to yourself"*, Colette expressed concern over not wanting to seem hypocritical about a behaviour in which she herself had engaged for many years *"It is stinking, but you done for 30 odd years Colette, so why blame somebody else if they want to do it."*

This desire to simultaneously straddle both the smoker and non-smoker identities did, however, have a number of consequences regarding the steps that participants felt they could legitimately take in attempting to reduce their exposure to smokers/smoking (see Chapter 7). Lynn, for example, suggested that it would be inappropriate, and even potentially unwise, for her to minimise contact with smoking friends *"Because she'll think 'Who the hell does she think she is?' And that's going back to the 'I hope she falls flat on her face', do you know what I mean?"* Colette, in contrast, sought to justify her aversion to cigarette smoke, whilst at the same time being careful not to be critical of others for smoking around her; not only did she stress that her dislike of the smell was longstanding and pre-dated her quit attempt, but also that she was untroubled by family and friends smoking in her immediate vicinity.

Colette: You know, but the smell of a fag doesn't bother me, but I still don't like the smell of an ashtray or nothing like that. But I've never liked that even when I was a smoker. Oh I hate somebody smoking, blowing it into my face. I don't like that. I never have done. But it doesn't bother me if I'm sitting and somebody's smoking. You know if I'm out somewhere and somebody smoking, it doesn't bother me. You know "Oh God I could go that ..." No. It doesn't bother me the way, you know, how a lot of non-smokers, like my mum and dad they've come in and gone "Cough, cough". I've said "Shut up!" you know?

8.2.2 Shifting behaviours: the social network

Having considered the ways in which participants' behaviour evolved as their quit attempt progressed, I shall next look to explore those parallel changes that emerged in the behaviour of family and friends. Here, it is once again useful (as in Chapter 7) to draw a distinction between network structure and function which, more specifically in the context of this study, relate to the prevalence and frequency of smoking, and to the level and nature of social support, respectively. Turning first to structure, there were several examples of family and friends who, whilst initially making no changes to their own smoking habits, had latterly begun to cut down on the number of cigarettes that they smoked. Hazel's mother, for instance, had been a heavy smoker but, by the time of the follow-up interview, had reduced her cigarette consumption by more than half *"I've noticed a big difference in my mum. My mum used to be 40 a day and I don't even think now she's about 15."* Moreover, her mother was now considering going further and had mentioned the possibility of giving up herself *"But she says that to me. She says 'I think that's me. I think when these ones are finished, I think I'll got onto... try and stop' "*. Such steps were similarly evident among more peripheral social network members; since my first visit, for example, one of Colette's home hairdressing clients had announced that she had also stopped smoking.

Colette: And actually the... my pal that she comes up to get her hair done. I grew up with her. I don't go about with

her any more now but she still comes up and gets her hair done. And she's like "Well done, well done" and she came in two weeks ago and I said "Do you want an ash tray?" I don't mind her because if she's sitting there with her hair all soaked. She went "No, I'm a non-smoker". And I went "Oh!" So she has given up. I went "Oh very good, very good". She said "You're doing well, you're doing well" and then when I got the ash tray out she was like "No, I don't need it".

Interestingly, in neither of these examples did network members make an explicit link between the participant's quit attempt and their own, nor did they link their decision to stop smoking with a desire to support the participants. Closer examination of their motivations would, however, only be possible through further, direct interviews with the social network members themselves. This notwithstanding, it is still true to say that, for some participants at least, the concentration of current smokers among family and friends did diminish during the initial months of their quit attempt.

Again, though, changes to network structure were not only limited to the smoking status of individuals, but also involved reductions in the extent to which social network members smoked in the presence of the quitter. The most consistent and sustained degree of effort in this regard was demonstrated by Hazel's mother. During our initial meeting, Hazel had mentioned that her mother had recently started to smoke in another room while she was visiting "*She'll take her cigarettes through with her then and I think 'Good on you' "*", a move that was in stark contrast to her earlier behaviour when she had continued to smoke normally "*Oh no, she lights up in the living room.*" By the time of our second meeting, her mother had adapted even further, and was now trying to avoid smoking in Hazel's presence altogether; moreover, this change was evident not only within their own homes but also when they were out in public.

Hazel: So as I say I've been really quite ill with that. And then my mum was coming round with my dad and she was here that day that I was sick and she was here for a good few hours. And I says to her "If you need to smoke could you go and do it either at the front door" and it was blowing a gale outside. And she says "I'm

not wanting to open the door, hen, for the draught for you”, because I was going all that hot way and cold. Ken when your temperature’s up and down? I said “Well could you smoke in the kitchen?” But she only had the one and it’s the only time that she’s smoked.

And earlier in the interview:

Hazel: I noticed that on Monday. We were at the hospital, Monday and I thought “Before we go in she’ll light a cigarette,” but she didn’t, she just went right in. And then when we come out she said to me “I want to go to... into the town.” And I had bought a bag for my pal for her birthday and I was wanting to change it. It was too big, eh? And I thought “Here we go, we’ll go into Stirling and it’ll be, I have go to out for a cigarette.” But she never. Actually she never had a cigarette when I think about it.

Thus, in terms of network structure, some initial changes began to be apparent in the composition of participants’ social networks, with a number of family and friends making the transition from being a rather *inconsiderate* smoker who paid little heed to the impact of their smoking on the quitter, to being a more *thoughtful* smoker who was now careful about when and where they smoked. Furthermore, several social network members had begun the process of attempting to become non-smokers themselves.

The picture was, however, more mixed in relation to network function. In some cases, family and friends were seen as having provided regular and sustained levels of social support. Hannah, for instance, singled out her partner for particular praise as he had continued to show considerable interest in how she was getting on, encouraging her to keep going “*He’s been really supportive. ‘How many weeks now?’ or ‘How many days?’ or ‘Good for you, keep it up’ and ‘I’m very proud of you’. He’s been really good. Encouraging.*” Such sustained support was also found amongst more dispersed network members, with social media here providing a tool by which family and friends could continue to provide positive feedback, as Sarah explained “*And in fact since I gave up smoking... she hasn’t put anything up on Facebook for probably a year. And she knew how addicted I was and she just kept saying ‘Well done.’*” The effortful nature of this sustained social support can perhaps be equated to the effortful

avoidance of smoking evident among the participants themselves, suggesting that some social network members as well as quitters go through an action stage.

Accounts of sustained social support were, however, only evident in the first interview and, by the time of the follow-up, the responses of family and friends had begun to change. Most commonly, levels of social support were reported as being in decline, although the perceived reasons for this did vary across participants. Some, such as Catriona, felt that the quit had simply ceased to be at the forefront of other people's minds, particularly in the case of more peripheral social network members *"People forget though very quickly when you just work with non-smokers, when you don't, you know."* Lynn, on the other hand, seemed to believe that her family and friends would only have a limited supply of patience towards her quit attempt, and that they would expect her to adjust to her new non-smoking status in a relatively short space of time *"And people as well, they're only sympathetic and nice for a wee while, you know and then they eventually..."*, a sentiment that was perhaps reflected by her husband who, on briefly joining us during the second interview, mentioned that he had expected Lynn to have become more settled by that stage *"I thought you would have got a lot more calmer by now."* For others, though, these diminishing levels of support were welcomed as a signal that their non-smoking status had now become normalised by social network members, possibly suggesting that family and friends (like the quitters themselves) had moved into a maintenance phase in which they no longer felt the need to give constant feedback and encouragement.

Caroline: So do any of your friends and family do that sort of thing, keep saying you are doing well? Asking you really, how it is going, asking you how much.

Paula: I don't think as much now, it is just like the normal. We have not smoked for so long now.

Caroline: So did they at the beginning, though?

Paula: Yes, at the beginning they were asking how I was getting on and that. But now it is just like, Paula does not smoke now.

The one exception to this was, however, Hazel's mother. In addition to the efforts she had made to change her own smoking behaviour, she also seemed to have become much more supportive of her daughter's attempt to give up *"But this time I would say,*

like my mum's saying to me, she totally agrees with me 'Well you need to prioritise what you want to do and is it doing you any good smoking? No. So you just need to get your mind round it.' " Moreover, she had taken on a much more active role within the quit, both being protective of Hazel when it appeared that others might cause her to relapse *"Oh my God you were very stressed when you came back from your holidays and I says to your dad, if that Gwen makes her start smoking again, I'll kill her"*, as well as seeking to reassure her that she would eventually succeed despite having briefly lapsed *"Look, you were doing so well, you've done really, really well and it's just... you just keep trying and eventually you'll get it right. You know it'll stick."*

From this, though, it is evident that Hazel's mother only gradually came to the point where she was able to give the type of effortful social support that others offered from the outset. Hazel herself did not, however, appear to find this particularly problematic, in contrast to Lynn and Hannah who both hinted at a dissatisfaction with an apparent lack of synchronicity between their own support needs and the level of input provided by their mothers. Lynn, for example, explained how she had found the constant interrogation by her mother in the early days as being particularly irritating *"But initially in the beginning she was mentioning it all the time. I think she wanted to know all the time and 'Are you sure this time?' and that. I used to say 'I really don't want to talk about it.'* " The reverse seemed to hold true for Hannah, on the other hand, who described her dismay that the encouragement and support from her mother had dissipated relatively quickly into the quit.

Hannah: My mum, not so. I thought she might have been but she was alright at the beginning but it seems to have tailed off for some reason. I don't know why.

Caroline: So what does that... how, you know, how is this level of support changed from your mum?

Hannah: I don't know. I thought she might have said "Look, how long has it been" or "you're doing great".
Nothing, so.

8.3 The journey back to being a smoker

To recap, we have thus far seen that quitters incrementally shifted their behaviour away from that of being a smoker and towards that of being a non-smoker, gradually overcoming their initial preoccupation with not being able to smoke, replacing it with increasing sense of ease at being in non-smoking environments, and eventually being able to interact with smokers whilst not smoking themselves. In the terminology of the stages of change model (Prochaska et al., 1992), this reflects a move from the effortful action phase of quitting into the maintenance phase where not smoking has become more normalised. Moreover, a similar pattern was also evident amongst the quitters' social networks, with some family and friends demonstrating periods of both more, and less, intense social support, although the points at which they transitioned between these different phases did not always coincide directly with the pathways taken by the quitter themselves.

I noted at the outset of the chapter that the stages of change model is not linear, but allows for quitters to relapse and return to an earlier stage. Four of the participants in this study went on to smoke at least once following a period of complete abstinence. Nadia, Heather and Sarah all took up smoking again on an ongoing basis, although they continued to talk about their plans for making another quit attempt, suggesting that they had returned to the preparation stage of change. Sarah, for example, had identified a couple of weeks that she felt would provide an ideal opportunity for her to stop again; she would be working at home in the early summer and her husband's constant presence would prevent her from being able to smoke, allowing her to re-establish a routine of not smoking *"I think I've got a window before I start International Summer School which means I will be at home all the time. I will be preparing stuff for International Summer School from home, which means Graeme [her husband] will be there all the time. That'll help a lot and I'll just set that whole pattern up again."* In contrast, Hazel had briefly relapsed but, after several days, had gone back to the pharmacist to get advice on how to resume her quit attempt *"So I went back down to the chemist. I says to them, I says 'I've had a lapse' "*, thereby almost immediately returning to the action stage. It is, therefore, the accounts of these four participants that provide the basis of this concluding analysis. Here, I take as my starting point the observation that relapse (like quitting) is not a one-off event but rather a more protracted process in which quitters not only begin smoking again but

also have to renegotiate their renewed smoking status with family and friends.

8.3.1 Causes & circumstances of relapse

Participants typically sought to draw a distinction between what they saw as the underlying cause of their relapse, and the specific circumstances in which it had occurred. Turning first to the *causes*, it is slightly surprising that none of the relapsers attributed their return to smoking as being solely down to a lack of willpower. Instead, they highlighted a combination of practical, broader psychological and social network-related factors, perhaps in the belief that such externalised explanations might afford some justification for their lack of success. Nadia, for instance, focused on the practical barriers to obtaining NRT patches once she had reached the end of her smoking cessation course *“But as soon as it went to you had to go and pick them up yourself, I kind of got more lackadaisical, whereas I think if I was still going to the Clinic and picking up my patches, I think I’d probably still be stopped.”* Moreover, she went on to explain that, while she had *“never even gave it a second thought”* when still using the patches, she had almost immediately began to hanker after a cigarette once they had run out *“That was the first weekend I’d went out without a patch on. So even when I was getting myself ready, I was like ‘Oh I could have a cigarette.’ ”*

In contrast, Heather felt that stopping smoking had caused a depressive episode which had left her barely able to function *“But I couldn’t look at you, I couldn’t hold a conversation with you, I felt sorry for myself, nobody loved me, nobody wanted me, I couldn’t stop crying.”* As a result, she had decided to abandon her attempt at quitting *“But that is why I started, there’s no other reason”* and, although she could not be entirely certain, she suspected that her subsequent recovery had been prompted by the fact that she was smoking again.

Heather: I feel better. But I don’t know if that’s just coincided with me coming out of whatever I was feeling, if that makes sense. Like that seemed to help.

Other accounts, however, centred more around social network-related explanations. During their last quit attempt, for example, Nadia recalled how she and her mother had become rather irritable, putting a strain on their relationship. After one particular

disagreement, Nadia had therefore gone back to smoking *“And then my mum or, I can’t even remember where we were but we were out for the day and I had an argument over nothing. I was like ‘That’s it.’ And I went away to the shop and bought myself fags.”* Whereas Heather’s current quit attempt had been derailed by a depressive episode, she described how her earlier efforts to stop had come to an end as a result of a traumatic event that was completely unrelated to giving up smoking; her husband had been involved in a serious accident and she had started to smoke again in order to cope with the shock and stress *“And my husband had a bad accident, he fell off a roof, and that was me.”*

Thus, we can here see the potential of our wider social relationships (as in Chapter 6) to impact on our ability to maintain health behaviour change, a point that is further reinforced by the experiences of Hazel, who had a complex and troubled relationship with her daughter. A major argument the year before had created a serious rift between them and, as a result, they had not spoken to each other for over six months. Moreover, to her considerable distress, Hazel had not been allowed to see her grandchildren in all this time. Matters had come to a head when, one day, her grandson had appeared unannounced on her doorstep, prompting her daughter to call the police. Hazel had become so distraught over this incident that she had turned to cigarettes to calm her down, laying the blame for this lapse squarely at the feet of her daughter.

Hazel: I had another wee set to with my daughter. Her wee boy turned up at my door and she got all the police and everything up and it tipped me right over the edge.

And then later in the interview:

Hazel: It was just the stress factor but then once I calmed down... my dad took Alice out for a wee walk with the dolls pram, and I got it all out. I was crying and I got really upset about it. Once I got it all out my system and then I had another smoke and I had another coffee and I said “And look what she’s making me start smoking, again”. I said “I hate that bitch” and I was ranting and raving.

For Sarah, the other relapser, the underlying cause was however less clear cut. At different points in the follow-up interview, she variously hinted that her return to smoking was due both to psychological and to social network-related reasons, on the one hand explaining that she had felt somewhat dejected on realising that quitting meant permanently excluding cigarettes from her life, and on the other hand expressing some concern that her increased irascibility was having a detrimental effect on her social relationships.

Sarah: I think basically what happened, about two weeks after I last saw you, I think it suddenly sunk in, this was for life. I got really low over that.

And then later in the interview:

Sarah: I was grumpy at people in here and everybody was just “No you can’t be grumpy, you’re never grumpy.” And I went “I can assure you I was really grumpy on an email to at least three people.” And I have a friend who works here and I copied her into one of the emails and she said “Yes I think they’ll have got you loud and clear.” So I really was grumpy, I’m not just imagining it. And I just think from a ... I don’t know how to put it ... from a social acceptance point of view, I didn’t like to think that I was coming across grumpy.

This then brings us to the specific *circumstances* surrounding the relapse. Here, rather than looking to explain their underlying reasons for smoking again, participants instead focused on the mechanics of how the relapse had come about. Perhaps unsurprisingly, all four relapsers had turned to the smokers within their social networks as an immediate source of cigarettes. In several cases, participants had merely waited for a social occasion to arise in which they could attempt to scrounge a cigarette.

Nadia: Well I had like ... my mum was outside smoking and I said to her “Can I have a draw?” and she was like “Don’t be stupid.” And I was like “Only one will be fine”. So I never had the full cigarette, I only had the draw, and it was disgusting. And then a wee while

later I was the same. I was like “Go and give me another draw?” and that kept going until maybe about... I don’t know... nine or ten o’clock. And then by that time I’d had a few drinks and then I managed to have a full cigarette, and I was fine with it. So then the rest of the night I just kept smoking.

Others had, in contrast, sought to coerce family and friends into helping. After the altercation with her daughter, for instance, Hazel had visited her mother and insisted that she give her a cigarette *“And then I went down to my mum’s and I said to her ‘You need to give me a cigarette’ and she went ‘I’m not’ and I went ‘You’ll have to give me a cigarette.’ ”* Heather, meanwhile, had taken a cigarette from her daughter’s handbag without permission *“So I actually went into her bag and I took it and I went out the back”,* despite attempts by her daughter to dissuade her *“I says ‘I’ll have a cigarette,’ and she says ‘Don’t be stupid, Mum.’ ”*

Interestingly, in none of these cases did the participant go on to criticise their social network for being complicit in the relapse, instead being keen to emphasise how family members had gone out of their way to deflect them from having a cigarette. Moreover, Hazel had stressed that her mother had been extremely reluctant to help out and had only done so because Hazel was so upset after the argument with her own daughter *“I shouldn’t be giving you them but take them anyway, I don’t like to see you that stressed out.”* Indeed, her mother had further sought to underline her reluctance by making it clear that this was a one-off and that she would not be giving her anymore cigarettes in the future *“That’s all I’m giving you, I’m not giving you anymore.”*

By way of contrast, Sarah had started smoking again whilst having lunch with a friend whom she had not seen in over a year. When her friend had gone out to smoke, Sarah had made the spontaneous decision to join her, explaining that she had simply got carried away by the occasion, and that it was in no way her friend’s fault. Indeed, Sarah was careful to point out that her friend had shown particular sensitivity in not going out to smoke for several hours. The dispersed nature of Sarah’s network did, however, appear to have been significant here, since the sense of re-establishing a bond with an old friend, one with whom she had a long-standing association of sharing a cigarette, appears to have been central in Sarah’s lapse.

Sarah: I haven't seen her for, God probably a year and we were really close buddies. So we just decided it was ridiculous, so I met her on a Saturday afternoon in Edinburgh. We had a year to catch up on, so we just sat and ate some very nice food, probably drunk too much and I had a cigarette.

Caroline: And was that the first time she knew that you'd quit then?

Sarah: Oh no, she already knew I'd quit. And she was very good because when we first met up she didn't say anything about cigarettes or anything and then after, to be fair, three hours, she said "I think I'll just go out and have a cigarette." And I went "Oh for old time's sake, yes," and I knew at the time I shouldn't have done it.

And then later in the interview:

Sarah: It was a reconnection with a really old friend, you know? It's probably how I first met her actually, in here, outside having a cigarette in the quadrangle.

Finally, to conclude this section on the causes and circumstances of relapse, I return to my earlier observation that relapse is not a one-off event but an ongoing process. Thus far, we have seen that social networks typically played an integral part in the first episode of smoking after the quit: in addition to family and friends being the agents (both deliberately and unintentionally) of stressful episodes that led directly to a resumption of smoking, participants also identified the smokers in their social networks as an easy and convenient source of cigarettes. Relapsers did not, however, seem to view this first episode of smoking as being the point at which they made the transition back to being a proper smoker. Instead, the complete re-adoption of the smoker identity only appeared to happen once the participants took full ownership of their relapse by buying cigarettes for themselves. In Heather's case, this occurred relatively quickly *"But then I didn't smoke for the rest of the day and I don't even think I smoked the next day. And then I can't remember where I was, Caroline, and I bought a packet."* For Sarah and Nadia, though, the process was more cyclical, with

periods of abstinence being interspersed with episodes of social smoking. After her initial lapse, for example, Sarah had felt ashamed and did not smoke again until about a week later when offered a cigarette by an old smoking buddy at work; it was this second lapse that had prompted her to purchase her own supply of cigarettes and to begin smoking regularly once more.

Sarah: I didn't enjoy it, I felt naughty and then I thought "Why the hell did I do that because I didn't enjoy it and it was just the thought of it and..." which was good because it stopped me smoking for the rest of that week and then about a week later... probably a student here... in fact I know it wasn't... probably a student I hadn't seen for months, who's in the final year and wanted to talk about something. And sort of produced a roll up from her pocket and I went out and... And then that's when I think I actually went and bought ten cigarettes and that's when I had one, I gave them to Anna [her office mate]. And then it just became a sort of routine, once every four days.

The route to full relapse was, in contrast, more protracted in Nadia's case. For several weeks, she had managed to limit her smoking to those occasions when she was out socialising. As her husband Scott (the only other smoker in her household) had been away working offshore, she had managed to remain abstinent for the rest of the time. This had changed, however, on the next occasion that Scott was home. He had relapsed some while ago and when, one morning after a night out, she had found him smoking downstairs, Nadia had given into temptation. Moreover, she had gone on to smoke for the remainder of the weekend, eventually buying her own cigarettes on the following Monday.

Nadia: And then I think the Saturday I had a night out at the Casino and everybody went up to Mum's first for a drink and I thought "I'll just have one and I'll be fine". So I did. The whole night I smoked, I probably had about six and I was absolutely fine. Then on the Sunday I woke up and I was like, that's it I'm only

going to smoke when I'm drinking. So I never had any on the Sunday and then I went a full week, never had any. And then I think the following Friday my ... I think that's when Mum had a barbecue ... I don't know, like maybe a week past or something and then Mum had a barbecue on the Friday and I had one.

And then later in the interview:

Nadia: Probably because I had one ... like the last couple of times that I was smoking, like at the Casino for instance, I was smoking on the Saturday but then on the Sunday I was back home and there was nobody else smoking, so I didn't think about it. Whereas, this weekend when I was smoking, I got up the next again day and Scott was smoking, and so I was like "Oh I'll just have one," and then it kind of just escalated from there.

And then later again:

Nadia: And then Monday I went and bought them, so I've been smoking probably Monday...well, probably Friday.

8.3.2 Resumption of smoking

A complete resumption of the smoking was not, however, merely about relapse. Instead, it involved a much broader, and arguably more complex, process in which participants also had to renegotiate their changed smoking status with social network members. Here, perhaps, the most immediate tactic was to keep quiet. In Hazel's case, it had simply not been necessary for her to share her relapse with her young niece as her relapse had been short-lived "*And by the time she came back through to visit me, I'd stopped again so.*" For others, though, remaining silent almost seemed to allow them to revel in the act of clandestine smoking; Heather, in particular, appeared to derive considerable satisfaction from having a secret pleasure of which most of her family and friends were completely unaware. Beyond this, though, Heather did also suggest that keeping quiet had acted as a brake on the number of cigarettes that she

smoked, thereby delaying her full-scale relapse, albeit only temporarily.

Heather: And to start with I wasn't smoking in front of anybody. I was kidding on that I wasn't smoking but I was. The minute Bob [her husband] would go to his work, I was like [acting out puffing on a cigarette]. I'm like a kid in a sweetie shop, that's what I was like, getting something that you shouldn't be getting

And then later in the interview:

Heather: So because nobody knew, you were only having a couple a day. If I could have kept it like that, I'd probably have been fine. I'd have been better not telling anybody because those two cigarettes or three cigarettes I had, I'll be perfectly honest with you, Caroline, I really enjoyed them. Where now I'm getting back to the stage where I'm smoking for the sake of smoking.

This initial reluctance notwithstanding, when the participants did eventually go onto share their relapse with other people, they found that their responses were, in fact, rather low key. Nadia, for instance, described how her social network had limited their comments to suggesting that she had been somewhat foolish.

Nadia: He [her dad] thinks I'm really daft because he's been stopped for like ten year or something like that. He's been stopped for ages. But everybody's just the same, but then I've stopped that many times and started that many times, that ... folk probably aren't that surprised. They're just like "You're daft."

Heather, on the other hand, felt that family and friends were avoiding mentioning her return to smoking, both out of a concern for her fragile mental state and out of a relief that she was now on the mend *"I don't think anybody would have said anything. I think they were frightened to say anything. I think the fact that I could actually have a conversation without bursting into tears."* There was, however, one person about whom Heather appeared more uncertain. She had decided to allow her husband to

discover her smoking one night after work, but then in a seemingly defensive gesture, immediately tried to deflect from making any criticism *“He come in from his work one night and I went ... he says ‘What are you doing?’ and I says ‘I’m having a cigarette.’ ”* Despite this, though, there was also a sense that she gained some comfort, and perhaps even some self-justification, from the belief that her husband understood the health problems that she was facing.

Heather: And even Bob [her husband] actually said “If that’s what’s going to make you better this now, you just...” He actually, if anything ... I don’t mean this the wrong way but, he didn’t encourage me to smoke, if that makes sense but it was he wasn’t discouraging me. It was like “If that makes you feel better this now, till you get through, that’s fine”.

This need for understanding and empathy was, similarly, highlighted by Sarah. In general, she had chosen to limit knowledge of her relapse to those people with whom she had directly smoked. She did, however, seem to single out her office mate (a non-smoker) as a confidante, anticipating that she would appreciate the work pressures that Sarah was under.

Sarah: The person I share a room with, when I first had one, I actually gave her the rest of the packet and said “I’ve had a cigarette, will you please take these away?” And she forgave me that and then smiled and said “Yes.” So that person knows but is equally, absolutely, up to here at the moment so probably would understand it.

For those participants who were quitting with someone else, relapse brought about a number of specific challenges that required particularly careful handling. Heather, for example, was determined that her return to smoking would not have a detrimental effect on her daughter’s (Nadia) quit attempt. This manifest itself in a number of ways, including a conviction that Nadia was resolute about giving up on this occasion *“I think Nadia’s made up her mind this time. It’s different. She’s got past it and there is a difference, Caroline definitely”*. While such a view possibly allowed Heather to believe that her own actions would have only a limited impact, this assumption was not entirely substantiated by Nadia herself, who explained that constantly being with smoking family and friends could be difficult.

Nadia: I think if none of us are smoking then it would be easier. But as soon as one person starts smoking then it gets harder for the other people and then because you're going about together all the time.

Heather did not, however, appear to have picked up on this concern and, even though she knew that Nadia had smoked several times when they had been out together socially "*She's had a couple of wee ... on a night out having a wee couple of puffs and then that's her, you know*", she nevertheless sought to reassure herself that these lapses were isolated and did not signal a wider resumption of smoking "*But the next day ... no, I've never seen her.*" Despite this, Heather was less hesitant in making a connection between her son-in-law's (Scott) smoking, who had just returned for his latest spell of home leave, and that of her daughter.

Heather: But I know that she has had a cigarette when she's been out with Scott, because they were out at the pub whenever, and she'd had one because Scott's smoking. She probably will do when she's on holiday. The fact that he's smoking so...

Alongside these attempts at distancing herself from Nadia's smoking, Heather did though also take positive steps to try and mitigate the impact of her own relapse, being mindful of the fact that she should avoid going out for cigarette when her daughter visited.

Heather: And I don't really smoke in front of them if that makes sense. I've never really smoked in the house anyway, so if I have a cigarette, I would go out the back. But if Nadia's popping in for a coffee, I wouldn't say "Right I'm going for a cigarette". You know I wouldn't rub her nose in it now. She's still ... it's still early days. If that was a couple of years down the line, I probably wouldn't mind but she's ... I don't want her doing that.

Sarah, in contrast, expressed a number of anxieties about what would happen if her quit partner and husband, Graeme, discovered that she was smoking again and, as a result, she had decided not to tell him about her relapse. In part, this was borne out of

a desire to avoid a possible confrontation with Graeme: not only was she concerned about his likely reaction “*I think he’d go ballistic*”, but she also appeared to be embarrassed that she had not delivered on her side of the bargain “*I think that’s letting the side down and I think I’d be totally ashamed.*” It was, however, also connected to a belief that, if she were to be open about her relapse, then it would likely lead to a full-scale resumption of smoking on both their behalves. Interestingly, Sarah did nevertheless suspect that her husband was aware that she had gone back to smoking but that he too had opted not to say anything in the hope that his collusion would give her the space that she needed to try and make another quit attempt in the near future.

Sarah: So what do I think would happen? I don’t know. It could be a disaster. We could end up “Oh fuck this!” and end up going and buying a packet of fags and end up back where we were. But I wouldn’t let that happen because we’re too far down the road that way. And I did hear him on the phone the other night talking to a friend. I can’t remember who it was now. He said ... I can’t remember the exact wording but it was like you know ... he must have asked something about the smoking and he said “Yes, so far” and I’m thinking “Oh God”. No we’re not going to revert back.

While shortly before:

Sarah: I think he might suspect because when we were away in Dublin, he said something and... now let me think of the phrasing... “That’s good, you’ve not had a cigarette for a while. I mean four months.” And I just sort of looked at him and I went “Yes, it’s nearly four months now” sort of thing. And I thought “He knows!”

And earlier still in the interview:

Sarah: He’s been very good and not saying anything which is the right thing to do, because if he doesn’t say anything, I will totally stop again. I think I’ve just got to get over the next three weeks and I can concentrate again.

8.4 Summary

The stages of change model (Prochaska et al., 1992) views quitters as moving backwards and forwards through five different states, namely pre-contemplation, contemplation, preparation, action and maintenance. In this chapter, we have seen that the social interactions surrounding an attempt to stop smoking did not remain static but rather adapted according to where on the behaviour change spectrum the quitter was located. Two distinct phases were, furthermore, evident in these evolving patterns of interaction.

First, the demands that ‘successful’ quitters made on their social networks altered as they moved from the effortful action stage of behaviour change to the more habitual maintenance stage. At the outset of the quit, participants expressed a general wariness at being around the smokers in their social networks, stemming from a concern that they maybe tempted back into smoking. Relatively quickly, however, this wariness was subsumed by an increasing dislike of the smell of tobacco smoke, coupled with a developing willingness to be critical of smokers. Over time, moreover, participants began to appear more comfortable both in non-smoking environments and in the presence of continuing smokers, perhaps suggesting a growing separation from the smoker identity, alongside a developing sense of attachment to the non-smoker identity. A number of quitters did, nevertheless, demonstrate a degree of reluctance in completely severing from the smoker identity, apparently out of a concern that they might become one of the extreme anti-smokers that they abhorred, despite the implications that this ultimately had for their ability to reduce their exposure to smoking. Such changes in behaviour were not, however, solely limited to the participants themselves; some family and friends were similarly seen to adjust their actions as the quit attempt proceeded. In most cases, this involved an immediate period of heightened interest and encouragement, followed by a gradual decline in the levels of support, matching the shifts in behaviour seen amongst the quitters. In several cases, though, there was seemingly a disjunct between the participants and their social network members in the pace and pattern of transition, leading to some dissatisfaction amongst participants with the perceived helpfulness of family and friends.

Not all participants were, on the other hand, successful in their quit attempt, instead going on to relapse, returning to the preparation stage of Prochaska et al.’s model.

Here, participants drew a distinction between the underlying causes of, and the broader circumstances surrounding, their return to smoking. In terms of the causes, they identified a range of factors that they appeared to blame for their relapse, including the role of family and friends as a primary source of stress, whether this be unintentionally or deliberately. The circumstances, in contrast, focused on the way in which the relapse had come about and, universally in this study, involved quitters in seeking a supply of cigarettes from the smokers within their networks, sometimes casually in a social situation and sometimes in a more coercive fashion. Full-scale resumption of smoking did not, however, always immediately follow this first relapse, with participants instead describing a more cyclical process in which periods of abstinence were interspersed with episodes of social smoking, up until the point where they bought cigarettes for themselves, thereby taking ownership of the relapse. Perhaps more challenging, though, was the need for participants to renegotiate their return to smoking with family and friends, variously drawing on the strategies of keeping quiet, careful disclosure, and eliciting support and understanding. For those participants who were giving up in conjunction with another member of their network, moreover, there were additional concerns around avoiding any adverse impact on the stop smoking attempt of their fellow quitter.

CHAPTER 9

Implications: theory, methods & intervention

9.1 Introduction

I shall conclude this thesis by situating my empirical findings within the literature presented in Chapter 2 and Chapter 3, highlighting how my research progresses the field and exploring promising directions for future work. In doing so, I shall seek to address my five main research objectives (restated below). I start in Section 9.2 with a brief overview of my results, focusing on the key messages around which this discussion will be based. The remainder of the chapter will then be divided into two main parts, with the first half (Section 9.3) reflecting on the contribution that this thesis makes to advancing our theoretical and conceptual understandings of the role of social networks in giving up smoking, and health behaviour change more broadly. Here, I shall consider separately the implications with respect to network structure (Section 9.3.1) and network function (Section 9.3.2). In the second half of the chapter, I shall then go on to discuss how my findings might be taken forward in order to further develop and improve existing theoretical models (Section 9.4.1), research methods (Section 9.4.2), and network-based cessation interventions (Section 9.4.3).

Objective 1: To consider how our conceptual understanding of the mechanisms linking social networks and health behaviour might be extended to better reflect the challenges of smoking cessation and individual health behaviour change.

- Objective 2:** To investigate the processes by which the different elements of the social network combine to jointly influence smoking cessation.
- Objective 3:** To explore the ways in which the smoker and their social networks together adapt and change over the course of a quit attempt.
- Objective 4:** To identify areas in which existing methods for the study of social networks and smoking cessation might be expanded and enhanced.
- Objective 5:** To gain insights into how smoking cessation interventions might be developed to more effectively harness social networks in order to improve quit outcomes.

Throughout this chapter, moreover, I shall seek to reflect on the strengths and limitations of the current study, giving thought to the consequences for the interpretation of my findings and for the ways in which this research might now be progressed. Here, the qualitative methodology adopted was especially suited to the investigation of a complex social process like smoking cessation (Curry et al., 2009), and the use of in-depth interviews, combined with a blank-sheet approach to social network mapping (Emmel and Clark, 2009), allowed participants to talk about their networks in a way that made sense to them. The longitudinal element of the study, moreover, gave the opportunity to develop a greater rapport with participants (Barbour, 2008), as well as enabling the exploration of the changes that occur, and the processes that are in operation, during the course of a quit attempt (Farrall, 2006). Balanced against this, the small number of cases made it inappropriate to generalise patterns of meaning and interaction beyond the immediate sample, to analyse variation in these patterns across socio-demographic subgroups, or to link the patterns to smoking cessation outcomes (see Chapter 4). The focus on individuals attending stop smoking clinics, furthermore, may have limited the applicability of the study findings to other groups, such as self-quitters, since the decision to seek help from a clinic may indicate, for instance, an increased willingness to request support and assistance from others. Finally, as interviews were only conducted with the quitters themselves (apart from the three participant pairs who were attempting to give up together), they necessarily represent only a partial account of the interactions between the quitters and their social networks.

9.2 Overview of main findings

Participants typically depicted their family networks either as small family units, which were comprised of nuclear and couple-centred families, or as more extended family units, in which multiple generations were seen to live in close proximity to each other and to maintain frequent contact (Chapter 5). Their friendship networks, in contrast, were characterised as containing a mix of general friends, work-based friends, and family who were friends, with the precise balance varying from individual to individual. Whilst not widespread, several participants also described a more dispersed element to their network, where the frequency and pattern of contact was shaped by geographical separation.

Social network responses to the participants' quit attempts were diverse, and the meanings that the quitters attached to these responses were, in turn, nuanced and sophisticated (Chapter 6), moving as they did between three different levels of understanding. On the one hand, they sought to make sense of the individual actions of network members, both classifying them according to the type of behaviour (smoking or support-related), and making evaluative assessments with regard to how helpful these behaviours had been to the quit attempt. Participants additionally looked to develop understandings at the level of the person, reflecting on the wider context of their relationships with individual network members, and variously referring to the social roles, routines and significant life events that served to structure their day-to-day interactions. Beyond this, participants also formed impressions at the level of the social network, contrasting the responses of different network members and linking their experiences of quitting to the shape of their networks.

Quitters were not, though, simply passive in the face of their network responses, instead actively seeking to manage their social worlds so as to get the help they needed (Chapter 7). Their actions in this respect were primarily aimed at reducing the extent to which they came into contact with smoking or at altering the level and nature of practical quit-related support that they received from their social networks. As the quit progressed, the demands that the participants placed on their family and friends changed as they transitioned from the effortful action, to the more habitual maintenance, stage of health behaviour change (Prochaska et al., 1992). Here, the participants shifted from a general wariness at being around smokers, to becoming more critical of both smoking and smokers, before eventually being able to relax and

feel comfortable in non-smoking and smoking environments alike (Chapter 8). Alongside this, the responses of family and friends also evolved over the course of the quit, with a gradual decline being seen in the levels of interest and support proffered by most network members. Those participants who relapsed, moreover, appeared especially cautious about revealing that they had returned to smoking, drawing on a range of strategies to handle the situation, including keeping quiet, careful disclosure and appealing for support and empathy, whilst at the same time attempting to avoid any negative consequences for their fellow quitters.

9.3 Contribution to the field

I move, next, to consider how these findings advance our understanding of the links between social networks, smoking cessation and health behaviour change more generally (Objectives 1-3). As in earlier chapters, I draw here on my conceptual framework for the social network, first outlined in Chapter 2 (reproduced below for ease of reference, Figure 9.1). In brief, this multilevel framework is rooted in the work of House et al. (1988b) and attempts to bring together existing research, covering sociological as well as more epidemiological approaches, to identify the primary components of the social network. At its broadest, this framework distinguishes between network structure and function, where structure relates to the way in which the network is organised, and function to the behavioural characteristics of the network. Beneath this sit further layers of increasing specificity: network structure is broken down into its compositional, dyadic and supradynamic elements, referring respectively to the individual, to pairs of individuals and to the network as a whole; network function is similarly divided into three main component parts, namely social support, social influence and negative social interactions (definitions for which are reprised in the relevant sections below). Using this framework to structure my discussion, I shall seek to set the results of this study within the wider literature and, in the process, to identify those areas in which the findings can be seen both to support and to extend existing research.

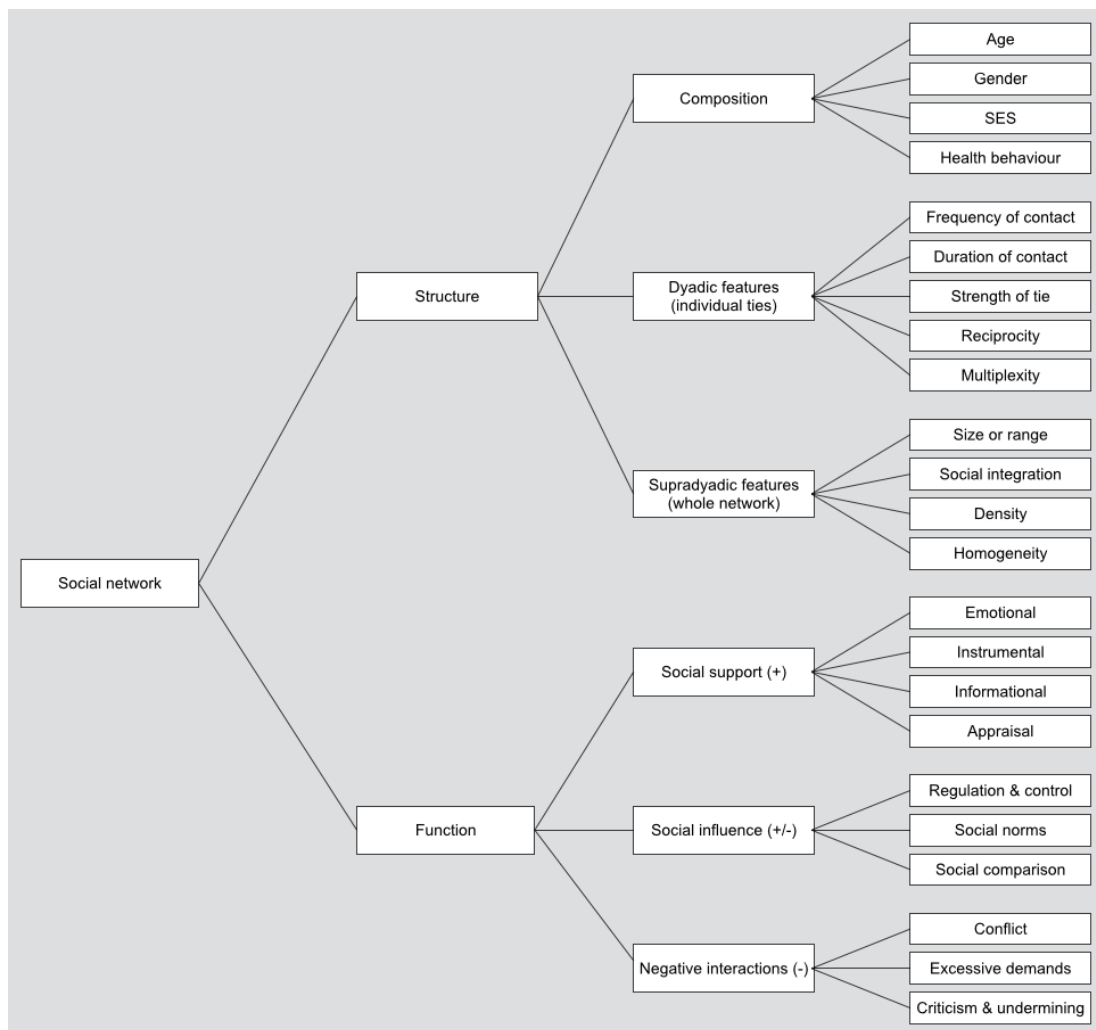


Figure 9.1: A framework for conceptualising social networks

9.3.1 Network structure

In Chapter 2 and Chapter 3, we saw compelling evidence that network structure impacts on health, health behaviour and health behaviour change. Conceptualisations of network structure have, though, typically been somewhat limited within health-related network research; a general tendency towards reductionism (Smith and Christakis, 2008) has been accompanied by an emphasis on measures of network structure that focus on specific social ties or types of relationship, such as siblings or friends, rather than on taking a wider view of the network and attempting to understand the way in which it is constructed as a whole. Indeed in their review, Umberson et al. (2010) point out that much of the literature on social networks and

health behaviour concentrates on marital status. Here, it has been shown that married people are typically less likely to engage in risky health behaviours, such as excessive drinking (Chilcoat and Breslau, 1996); they are, however, more likely to be overweight and to spend less time exercising (Jeffery and Rick, 2002; Umberson, 1992). Individual and spousal health behaviours have, likewise, been found to be linked, with Christakis and Fowler (2007), for instance, reporting that an individual's risk of obesity increases by 37% if their spouse is obese. This tendency towards a strong emphasis on the partner is particularly apparent within the literature on smoking cessation, where the majority of research focuses on marital status, partner smoking status or partner support for quitting (see Chapter 3).

Several authors have, though, demonstrated that the broader network can also impact on individual health behaviour. The studies by Christakis and Fowler (2007, 2008), for example, found that smoking and obesity amongst siblings, friends and work colleagues (as well as spouses) is associated with an increased risk of these behaviours in the individual, whereas Umberson et al. (2010) have highlighted the relevance of more formal ties, such as involvement with religious and community groups. A recent qualitative study by Koshy et al. (2010), moreover, identified four “*inter-related spheres of influence*”, the most proximal of which was the partner, followed by close family, friends, and finally the broader social, structural and cultural context.

Such findings are reinforced by the current study, which found that a whole range of different social network members were seen to be involved in the participants' quit attempts. Whilst, for many, their partners did indeed appear to be key, this was not always the case, with parents, adult children, siblings, friends, and work colleagues all variously being described as important. The perceived level of influence and the nature of the relationship (e.g. partner, family, friend) did not, therefore, necessarily overlap. Rather, the degree of the importance seemed to be judged according to the role that network members played in the quit, with a range of people being identified as having a particular impact, namely: fellow quitters; those people who made a sustained effort to engage with the quit and provide ongoing practical support; those people who were especially negative and who refused to help; and more dispersed or peripheral network members with whom a new non-smoking routine had not been established. In contrast, family and friends who limited their input to simple verbal feedback, regardless of whether they were core or peripheral to the network, were largely viewed as being irrelevant to the quit. Thus, for the participants in this study

at least, some core network members had a very limited input into the quit, whilst other more peripheral members had a significant impact.

Furthermore, whilst this thesis does not attempt to explore statistical associations between more sophisticated, supradynamic measures of network structure and smoking cessation, it does provide some support for the idea of a possible connection between the shape of the participants' networks and their experiences of quitting smoking. Membership of a small nuclear family can serve, for example, to limit exposure to other smokers and, in cases where partners are giving up together, can reinforce the sense that they are in it together, thereby providing a social environment which is conducive to remaining quit. In contrast, membership of a more dispersed network can present particular challenges since the sporadic nature of contact with family and friends can prevent the formation of new deep-rooted, non-smoking routines. Interestingly, social networks that outwardly appear to be similar in structural terms may be experienced in very different ways: for instance, younger people may feel that a small family unit provides them with a secure source of protection and support, whereas older people may become conscious of the need, as health problems begin to surface, to develop a wider network of contacts.

9.3.2 Network function

In terms of the functional or qualitative components of the network, social support and negative social interactions have been identified as two particularly key elements in shaping health and health behaviours (Berkman et al., 2000; Berkman and Krishna, 2014; Umberson et al., 2010). To recap, social support covers that part of our social relationships in which we exchange aid and resources, both physical and psychological, with the intention of providing help and assistance to others (Heaney and Israel, 2008). Four main types of social support have been described (House, 1981): *emotional* which encompasses expressions of love, understanding and trust; *appraisal* which relates to the giving of evaluative feedback aimed at improving self-esteem; *informational* which involves sharing knowledge and advice; and *instrumental* which focuses on the provision of tangible forms of support, such as financial assistance. Where social support is widely viewed as being an inherently positive construct, negative social interactions refer to those elements of network function which are unhelpful or even harmful, including criticism, excessive demands and conflict.

Within the context of smoking cessation, these two constructs have most commonly been assessed using the Partner Interaction Questionnaire (PIQ), a scale that was first introduced by Mermelstein et al. (1983). Various forms of the PIQ are currently in existence, with the 20-item version being the most often used; this simplified version was suggested by Cohen and Lichtenstein (1990), who dramatically reduced the number of items (from 76) and omitted a subjective helpfulness rating, arguing that objective measures of behaviour (e.g. the frequency of a particular form of interaction) are more relevant to the development of smoking cessation interventions. The PIQ-20 covers 10 positive and 10 negative behaviours (again reproduced below for ease of reference, Table 9.1), with these labels referring to the nature of the interaction rather than to its likely impact on quit outcomes. In a recent paper, however, Burns et al. (2014) have argued that the scale could be more appropriately sub-divided into four separate components: emotional support, instrumental support (including one negative item relating to talking the quitter out of having a cigarette), complaints about the quitter, and criticisms of smoking.

Social support

Participants in the current study identified a range of different network behaviours that can be seen as falling under the umbrella of social support for quitting (although my inductive analytical approach meant that these have not been explicitly labelled as such within the analysis chapters). Here, quitters perceived the most helpful actions as being those that involved the giving of direct practical assistance. In some cases, this support came in the guise of behaviours that were aimed at maintaining the quitter's motivation through providing encouragement (a form of emotional support) and focusing on specific achievements (appraisal support). Others sought to help the quitter in managing their withdrawal symptoms (instrumental support) by, for example, assisting with medications, purchasing e-cigarettes, or devising distraction techniques. Others still were seen to perform gate-keeping tasks (appraisal and emotional support), including checking that participants had not returned to smoking, applying gentle pressure to ensure they did not relapse, and supporting them through moments of temptation. Interestingly, whilst these latter forms of behaviour were characterised by Cohen and Lichtenstein (1990) as being negative and controlling, the participants in this study appeared to view such actions as being delivered with a supportive intent, more closely reflecting the categorisation of Burns et al. (2014).

Table 9.1: Partner Interaction Questionnaire (20 item version)

Instrument Subscales and Items	
Negative Behaviours	
1.	Asked you to quit smoking
2.	Comment that smoking is a dirty habit
3.	Talk you out of smoking a cigarette
4.	Comment on your lack of will power
5.	Comment that the house smells of smoke
6.	Refuse to let you smoke in the house
7.	Mentioned being bothered by smoke
8.	Criticise your smoking
9.	Express doubt about your ability to quit/stay quit
10.	Refuse to clean up your cigarette butts
Positive Behaviours	
1.	Compliment you on not smoking
2.	Congratulate you for your decision to quit smoking
3.	Help you think of substitutes for smoking
4.	Celebrate your quitting with you
5.	Help to calm you down when you are feeling stressed or irritable
6.	Tell you to stick with it
7.	Express confidence in your ability to quit/remain quit
8.	Help you to use substitutes for cigarettes
9.	Express pleasure at your efforts to quit
10.	Participate in an activity with you that keeps you from smoking (e.g. going for a walk instead of smoking)
Positive and negative behaviours were mixed together in random order when presented to participants	
Source: Cohen and Lichtenstein (1990)	

In contrast, demonstrations of empathy (emotional support) were judged more variably. Network members who had themselves tried to quit, regardless of whether or not they had succeeded, were perceived as understanding the particular difficulties associated with giving up smoking and were, therefore, generally seen in a positive light, as long as they were careful not to over-emphasise the problems. Attempts at empathy from never smokers, on the other hand, often backfired, especially where network members drew on their own non-smoking related experiences, as participants saw this trivialising what they were going through.

The least helpful forms of support were those that involved verbal feedback (emotional or appraisal support) in the form of simple statements of support, encouragement or praise, such as “*good for you*” or “*you’re doing really well*”. These statements were typically given on a sporadic basis and/or in response to a comment by the quitter; participants did, however, particularly seem to appreciate feedback that was proactively volunteered. Notwithstanding the fact that verbal support was mostly perceived as being of only limited significance, quitters nevertheless expressed some dissatisfaction at a complete lack of such feedback.

It is also worth noting that while participants made reference to experiencing emotional, appraisal and instrumental forms of social support, they made no mention of receiving information support. Despite this, the participants were seen to draw on the knowledge and experience of network members with regards to quitting, they just did not appear to link this to specific episodes of informational support.

Negative interactions

Reports of negative social interactions around quitting were, however, less in evidence. Several participants did mention family and friends engaging in such behaviours prior to their quit attempt, variously describing being subject to complaints about the smell, requests and pressure to give up smoking, and expressions of doubt about their ability to succeed when they raised the possibility of stopping. Indeed, in some cases, these negative responses appeared to stay with the participants as they progressed through the quit, being used both as a source of motivation and as a guide on how to behave (or not behave) towards other smokers. Once they had quit, however, negative responses from network members were rare and, when they did occur, they mainly involved references to the quitter’s ongoing

irritability or implicit suggestions that the participant would be unable to maintain the quit. Furthermore, participants seemed to be more concerned about the absence of explicit support than they did the presence of these more overtly negative behaviours.

The results of this study, therefore, appear to be at odds with the findings of other authors, such as Cohen and Lichtenstein (1990), who have shown not only that quitters do encounter negative responses from social network members, but that these more obstructive behaviours also have an adverse impact on quit outcomes. A number of possible explanations for this difference come to mind: there may be a general reluctance among participants to criticise their family and friends in a face-to-face interview; quitters may tend not to explicitly cast network responses in a bad light out of a (subconscious) concern that acknowledging negativity amongst others may be psychologically counter-productive; much of the research in this area was conducted several years ago (see Chapter 3) and it is possible that network members might have become more supportive over the last 25 years as a result of changing social norms around smoking and quitting; there may be methodological issues with respect to the negative component of the PIQ-20 scale (see Section 9.4.2 for a detailed discussion).

Social influence

Beyond social support and negative social interactions, the final main component of network function identified within the literature encompasses the processes of social influence. Whilst social influence has not been extensively studied in relation to adult smoking cessation (see Chapter 3), more attention has been devoted to this issue in relation to health and health behaviour more generally. Here, Heaney and Israel (2008) define social influence as “*the process by which thoughts and actions are changed by actions of others*”, whereas House et al. (1988b) and Umberson et al. (2010) distinguish between *direct* forms of influence in which network members seek to manage and control the health behaviours of others by, for example, regulating the amount they eat or prompting them to take their medication, and more *indirect* forms of influence where, perhaps, people adapt their behaviour to mirror the prevailing social norms. In adulthood, romantic partners have generally been seen as the main agent of such influence (as opposed to the parent during childhood and adolescence) and, as a result, the majority of social influence research among adults has focused on the partner, with less emphasis being placed on the wider family and network (Umberson et al., 2010). In their conceptual framework, Umberson and colleagues

argue that social influence can impact both positively and negatively on personal control (the extent to which an individual believes that they can determine the course of their own life through the actions that they choose to take). Marriage and parenthood can, for instance, bring a sense of routine, responsibility and obligation (a form of indirect social control) which can, in turn, promote a sense of personal control, higher levels of which have been associated with increased health knowledge, greater engagement with preventive health behaviours, and a reduction in risky behaviours. Within these formulations, the direction of influence is largely viewed as being from the network to the individual, although Umberson et al. (2010) do point to more recent conceptualisations that have begun to recognise the bi-directional nature of social influence.

The current study takes some initial steps in beginning to understand this bi-directional process with respect to smoking cessation, demonstrating that quitters are not powerless in the face of social network forces but instead actively seek to navigate and manage their social worlds, attempting to exert their own social influence over family and friends, with the aim of minimising exposure to smoking and increasing the social support available to them. Participants appeared to devote particular energy to trying to reshape the structure of their social networks, both in terms of changing the balance of smokers in their network and in terms of reducing the frequency with which they came into direct contact with family and friends when they were smoking. In relation to the first of these, various strategies were aimed at altering the distribution of smokers and ex-smokers in the network, including enlisting fellow smokers into a joint quit attempt, actively encouraging other smokers to try and stop at some point in the future, reducing the amount of time spent with smokers, and even, in some cases, stopping seeing smokers altogether. These latter two avoidance strategies did, however, appear to be especially challenging when they involved central, rather than more peripheral, network members.

The ‘contact frequency’ approach, in contrast, was aimed at maintaining a broadly similar pattern of interaction with family and friends, whilst at the same time reducing exposure to the act of smoking. In this regard, the specific strategies employed depended on the rules and routines that had surrounded smoking prior to the quit attempt. In cases where there was a pre-established pattern of smoking outdoors, participants described simply remaining indoors when social network members went outside to smoke. A more active approach was required, however, by participants

who had previously allowed visitors to smoke within their homes. In the main, this involved asking family and friends to smoke outdoors but, where this was deemed impossible (for example, because of poor health), the quitters compromised by allowing smoking in a designated room. Living with continuing smokers, on the other hand, required the most effort. For the one participant who was in this situation, her early attempts at stopping her husband from smoking around her had not been entirely successful but, after some initial clashes when he claimed to have forgotten that she was quitting, they seemed to have settled into a new rhythm where he would go elsewhere if she came into the room when he was smoking. Indeed, she was now considering whether she could go one step further and impose a complete ban on smoking indoors. Her husband's continued smoking did, nevertheless, appear to be an ongoing source of tension between them.

Efforts to increase (functional) social support, furthermore, were mostly targeted at the more practical forms of help and included explicit requests for instrumental support, such as asking a family member to buy an e-cigarette for them, as well as more implicit strategies in which suggestions of a joint quit attempt allowed for the development of mutually supportive patterns of behaviour that intrinsically involved encouragement, praise and empathy.

Here, then, we can begin to get a sense of the agency that quitters attempted to exert in managing their social networks, although these accounts still fall short of providing evidence of a more bi-directional process of the kind suggested by Umberson et al. (2010). For this, I turn next to the example of stress. From the days of the early work by Cassel (1976) and Cobb (1976), the links between stress, social networks and health have been long recognised, with networks being seen as one of the primary mechanisms through which the negative effects of stress on health are ameliorated (Cohen, 2004). More recently, Umberson et al. (2010) have highlighted the complex set of interactions that exist between stress, social relationships and health behaviours: (1) stress contributes to poor health behaviours; (2) stress can damage social relationships that are ordinarily supportive; (3) poor health behaviours, such as heavy drinking, can also undermine social relationships; and (4) poor relationships can cause stress, thereby leading to poor health behaviours. In smoking cessation more specifically, stress has similarly been identified as a well-established risk factor for relapse (Fisher et al., 1993).

Within the present study, it was one-off stressful events rather than chronic stress, that seemed to create particular difficulties with respect to the quit; social networks, moreover, appeared to be intrinsically bound up in these stressful events and in the quitter's subsequent reaction to them. Across the current and previous quit attempts, participants described a range of acutely stressful incidents that had led them to (considering) smoking again, some of which directly involved family and friends (e.g. relationship conflict or serious illness among network members) and some of which related to broader life events (e.g. bankruptcy following the collapse of a business). Beyond this, however, social network members also played a part in determining whether the participant ultimately went on to smoke, sometimes facilitating smoking by providing a source of cigarettes or by encouraging the quitter to smoke as a form of stress relief, and sometimes diverting the quitter from smoking by actively dissuading them from having a cigarette or by supporting them through the difficult time. Where in these examples, stressful events were seen to present a challenge to the quit attempt, in others, smoking cessation was seen to cause stress and potential harm to social relationships, with several participants reporting that their increased irritability and the disruption of shared smoking routines had led to friction in their interactions with others. Taken together, therefore, a picture emerges of a complex pattern of influence in which the individual quitter and the people within their social network are in a constant, and evolving, state of reciprocal dynamic interaction. This pattern of mutual influence was seen, moreover, to both shape, and be shaped by, the stop smoking attempt and wider external events.

9.3.3 Network meaning

Finally in this discussion of my findings and their contribution to the field, I come to the issue of network meaning. We have seen that quitters' understandings of their network responses were not solely restricted to the specific actions of family and friends, or even to the context in which these actions occurred, but also extended to reflect the meanings that they attached to their wider relationships and to their networks more generally. These results, then, begin to foreground the importance of meaning in social networks. Whilst generally less well covered by the existing literature than other components of the social network, some initial research has started to look at the part played by network meaning in shaping health. Several authors, for instance, have focused on the life affirming qualities of social networks

and the sense of purpose that people derive from their relationships with others (Berkman and Glass, 2000; Cassel, 1976; Cohen, 2004; Uchino, 2006), although much of this research has so far been restricted to theoretical rather than empirical work (Berkman and Glass, 2000). Others, meanwhile, have emphasised the various ways in which social meanings can become attached to specific health behaviours, with both health-promoting and health-harming consequences (Umberson et al., 2010). Here, then, the individual is viewed as being motivated to mirror behaviours that are commonplace in the social network (meanings through social norms), that are performed by high esteem network members (meanings attached to the social network), that are associated with particular social gatherings (meanings attached to social situations), and that reflect wider traditions and beliefs (meanings through cultural practices). Moreover, whilst sociological network research has tended to adopt a predominantly structural approach in recent years, Fuhse and Mutzel (2011) have argued that such structural analyses could be usefully extended by considering the subjective meanings that people attach to their individual relationships, stressing that the expectations and perceptions that we hold with respect to the people in our networks can shape the way in which we understand their actions.

It is this latter form of more individual-level meaning that is particularly apparent in the current study, with quitters being seen to interpret the actions of their family and friends from within the context of their wider relationships. A range of different social processes were seen to be operating in this regard. Firstly, *social roles* (such as being a mother) created expectations around how social network members were thought likely to respond to the quit attempt; participants' evaluations of network responses, moreover, were rooted in these expectations as well as in the objective nature of the behaviour itself. In a similar fashion, *lifestyle identities* fostered a sense of understanding, solidarity and behavioural expectation which generally led participants to be less critical of smokers, even if they continued to smoke, than they were of non-smokers, who were viewed as not being able to fully appreciate the specific difficulties associated with quitting smoking. Beyond roles and identities, the manner in which participants made sense of their current interactions around quitting were often deeply embedded in their *shared life histories*, with past life events shaping not only their expectations of, but also their own behaviour towards, others in their social network. Over time, furthermore, people were seen to have established *joint behavioural patterns* that had come to assume particular meanings within their relationships. Some of these involved specific rituals around smoking, and others

involved broader social routines (for example, relaxing at weekends or during periods of home leave) in which smoking had become enmeshed. In several cases, attempts at smoking cessation had caused disruption to these routines, creating conflict within their relationships.

9.3.4 Summary

In summary, therefore, this study can be seen to contribute to the literature on social networks and health behaviour change in a number of key ways. Firstly, the results confirm, as a number of authors have previously described (Christakis and Fowler, 2008; Koshy et al., 2010), that the involvement of family and friends in a smoking cessation attempt extends beyond the romantic partner to take in a wide range of network members, including adult children, siblings and friends. The current study goes further, however, to suggest that the degree to which an individual is perceived as being important to the quit is not directly determined by their relationship to the quitter but, instead, reflects their specific patterns of cessation-related behaviour. My findings, likewise, give weight to the idea of a connection between network structure and quitters' experiences of giving up smoking: a small family unit can, for example, provide a protective social environment whereas more dispersed networks can hinder the development of non-smoking routines. In contrast to earlier studies, the results here additionally highlight how quitters with broadly similar network structures can experience these networks in very different ways. Thus, this study not only supports a wider conceptualisation of network structure that recognises the need to consider how its various constituent parts are jointly organised, but also suggests that the subjective ways in which quitters perceive their networks to be constructed might prove to be as, if not more, important as more objective measures of network structure. The pattern of results with respect to network function can, likewise, be seen both to fit within, and to extend, our current models of understanding. Examples of social support for quitting were particularly common and, in the main, mirrored the different types of support identified by House (1981). Quitters' evaluations regarding the helpfulness of these network behaviours did not, though, directly reflect House's (1981) categorisation but, instead, distinguished between those behaviours that involved some form of practical assistance (the most helpful) and those that involved simple statements of verbal support (the least helpful). Unlike existing research, however, references to negative social interactions around quitting were much less in evidence

and, where they did occur, they tended to relate to the pre-quit period; although the precise reasons for this are unclear, it is possible that they are methodological rather than substantive in nature. Despite being the least well studied component of network function in relation to cessation (Chapter 3), my findings hint at the potential centrality of social influence in giving up smoking. Moreover, they suggest a more complex conceptualisation than that typically adopted, one in which social influence is seen as a bi-directional process (of the type alluded to by Umberson et al. (2010)) where the quitter both seeks to shape, and is shaped by, the behaviours of their social network members. Beyond these refinements of our understanding of network structure and function, the present study also points towards the need to expand current models of the social network to encompass a further dimension of network meaning. Whilst several authors have started to consider, in a relatively limited way, the importance of network meaning in influencing health and health behaviours (Berkman and Glass, 2000; Umberson et al., 2010), most frameworks (including that which I developed at the outset of this thesis) build on the work of House et al. (1988b)) and, therefore, restrict their attention to the constructs of network structure and function. The results of this study, however, shed some doubt on the adequacy of such an approach, since quitters appear to experience and subjectively interpret the actions of social network members through the filter of their wider relationships and shared life histories.

9.4 Applications & future work

I now conclude this thesis by outlining a number of areas in which this work could perhaps be usefully progressed. Here, I seek: (1) to scope out a way forward for the development of an extended conceptual framework aimed at better understanding the links between social networks and health behaviour change; (2) to make the case for the development of alternative data collection instruments in relation to social networks and smoking cessation, proposing a new modular scale, the *Social network & quitting questionnaire (SNAQQ)*, which will allow for the building of a more comprehensive and more coherent body of knowledge; and (3) to highlight the potential of interaction-based approaches to smoking cessation interventions.

9.4.1 Improving theory

In turning next to consider how the findings of this study might be used to develop and improve our theoretical understanding of the relationship between social networks and health behaviour change, I start with a brief reminder of two conceptual frameworks that can be seen to hold a particular relevance. Berkman et al. (2000) (updated by Berkman and Krishna (2014)) outline a broad, multilayered model of the mechanisms by which social networks are thought to impact on health, identifying four separate levels of influence, namely the wider macro-social conditions, the structure of our more immediate social networks, the functional qualities of these networks, and the individual physiological, psychological and health behavioural processes that directly help to shape health. More recently, Umberson et al. (2010) have proposed a detailed conceptual framework, focusing specifically on the factors that influence health behaviour; here, a wide range of different network and individual-level characteristics are described as working “*individually, collectively, and interactively to link social ties to health habits.*” (A fuller discussion of these two models can be found in Chapter 2).

Whilst these two models represent a step forward in recognising the multitude of interacting factors connecting networks to health, neither explicitly deals with the issue of health behaviour change. Moreover, both are rooted in a predominantly positivist research base that seeks to identify causal relationships between discrete elements of the social network and different aspects of health (Snape and Spencer, 2003). As a consequence, there is a reductionist propensity to view the network and the individual in terms of their constituent parts, rather than as an integrated whole, thus leaving open the precise issue of how these various network components are inter-connected. Alongside this, furthermore, there is a tendency to conceive of the social network as being an external reality that can be objectively measured and quantified, as well as to construe the individual as being somewhat passive in relation to their network and subject to network forces about which they can do little. The findings of the current study, however, suggest that a very different kind of relationship may exist between the individual and their social network, one where the individual actively seeks to make sense of family and friends’ responses to their behaviour change attempt by drawing on their *subjective understandings* of their network and the people within it, and one where the individual actively seeks to shape these responses through a process of *dynamic interaction* with network members. The

individual and the social network cannot, therefore, be understood as being entirely separate entities; instead, we need to recognise that the individual is part of the network and that, as such, they bring their own subjective understandings to their dynamic interactions with network members. Quitters attach meaning to the many different components of the social network, both in relation to how it is structured and organised, and in relation to its more functional qualities, such as social support, negative exchanges and attempts at control. They derive these subjective understandings, moreover, from the specific context of their network interactions and from the wider context and shared histories of their ongoing social relationships. Quitters are not, though, simply reactive with respect to their social networks, but seek to reduce the extent to which they come into contact with smokers/smoking and to improve the levels and type of support provided by family and friends. In some cases, this requires a relatively minimal amount of work; in others, a more concerted and sustained effort is necessary, depending on the specific smoking routines that previously surrounded interactions with social network members. Within this, however, it is important to acknowledge that the quitter does not act alone but rather in constant, dynamic interaction with their family and friends; each network member both seeks to influence, and is influenced by, their counterparts, with shared meanings and behavioural patterns unfolding over the course of the quit attempt.

We need, therefore, to recast our current conceptualisations of the link between social networks and health behaviour change, moving away from models, such as those of Umberson et al. (2010) and Berkman et al. (2000), in which the individual network components are conceived of as objectively realised constructs that exist independently of (albeit in interaction with) each other. Instead, the dual, cross-cutting processes of subjective meaning-making and dynamic interaction present themselves as potential mechanisms through which the individual attempts to understand and shape the responses of their social networks. Whilst the current study has provided a key first step in highlighting the need for such an alternative theorisation, much work is still required to understand more fully how the individual, the network and health behaviour change might be connected through these processes. Here, an extended longitudinal qualitative study in which quitters and their social networks are interviewed at regular intervals (every three months, say) over the course of a year, using a mixture of one-to-one and group interviews, would allow a more detailed exploration of the ways in which the processes of subjective meaning and dynamic interaction combine to influence the unfolding experience of smoking

cessation, and health behaviour change more generally.

9.4.2 Improving methods

Beyond these theoretical concerns, I also argue that it is time for a radical overhaul of the methods that we bring to the study of the relationship between social networks and quitting smoking (Objective 4). We have seen in Chapter 3 that, whilst the literature broadly supports the idea of a link between networks and cessation, the lack of consistency in the precise pattern of results makes it difficult to identify which specific parts of the network might be important and at what points in the process of smoking cessation they might act. Research on social networks and quitting, moreover, appears to have developed largely independently of the wider field of social network studies in health and has, thus, failed to capitalise on the vast amount of conceptual and methodological work that has been done with respect to health and health behaviours more widely (see Chapter 2). As a consequence, much of the network-focused cessation research does not have a strong theoretical foundation (in contrast to more psychological approaches), not only adding to the difficulties of discerning a clear direction of travel for our investigations but also complicating the interpretation of our findings. Furthermore, whilst existing research does encompass both structural and functional elements of the social network, it fails to truly capture the complex and multidimensional nature of our networks, instead relying on a small number of measures, most of which are relatively simple in design. This has been mirrored by a general over-reliance on secondary data analysis (primarily drawing on population-based cohort studies or smoking cessation intervention trials) which has encouraged the recycling of the existing limited set of social network measures, with very few attempts being made to critically evaluate, and to improve upon, these measures, perhaps contributing to the general lack of success in coming to a consensus about the precise mechanisms through which networks are linked to cessation.

With this in mind, I return to the PIQ-20 (the most extensively used measure of social network function in relation to quitting) and consider how it might be adapted to reflect the theory and findings presented in this thesis, in particular picking up on the discussion in Section 9.3 where I outlined the principal ways in which the current study can be seen to extend our understanding of the relationship between social networks and smoking cessation. Here, an analysis of the PIQ-20 highlights four main areas for possible improvement. Firstly, issues arise in relation to the most

appropriate scoring system. In the original 76-item version devised by Mermelstein et al. (1983), participants were asked both to indicate which behaviours they had encountered, and to rate how helpful these behaviours had been. The two scorings were then multiplied, and averaged across all items, to create a support index. Cohen and Lichtenstein (1990), on the other hand, removed the helpfulness score from their shortened 20-item scale, arguing that a simple behavioural indicator provided a more objective measure of social support and was, therefore, more relevant to the development of support-related interventions. For the participants in the present study, however, their subjective evaluations appeared to be central to the way in which they experienced their network responses. In coming to these evaluations, moreover, participants did not consider the individual behaviours of family and friends in isolation but rather drew on a complex range of multilayered meaning, encompassing the total set of responses from each network member, as well as the fabric of their wider relationships and network. Thus, it is clear that subjective meanings form an integral part of any quit attempt, and to ignore them is to ignore a key component of the mechanisms that link social networks to health behaviour change. I, therefore, suggest that the explanatory power of the PIQ-20 may be improved by the re-introduction of a helpfulness rating since this would better reflect quitters' actual subjective experiences.

The second area for improvement relates, in contrast, to the issue of network composition. Most versions of the questionnaire restrict their attention to a single member of the social network; this is typically the romantic partner (e.g. Pollak and Mullen, 1997) but some versions relax the definition of partner to include, where the quitter is not in a relationship, an alternative close counterpart (e.g. Lawhon et al., 2009). The current study, however, points to the potential involvement of a wide range of family and friends, with considerable variation in quitters' perceptions of the role and importance of these individual network members. May et al. (2007) have made some steps towards gaining a broader coverage of the social network by adapting the PIQ-20 to ask about behaviours over the entirety of network. Such an approach still does not allow, however, for the disentanglement of differing patterns of support across individuals, nor does it provide room for the inclusion of subjective evaluations in relation to each individual network member, thus limiting the extent to which a full exploration of the network breadth and complexity is possible.

Next, greater attention could also be given to the ways in which support-related behaviours evolve over the course of a quit attempt; the ten negative scale items, in particular, warrant closer inspection here. On the whole, the participants in this study described being subject to a number of negative interactions around smoking and quitting (such as complaints about the smell or pressure to quit) in the period immediately before they stopped. In some instances, moreover, these experiences appeared to stay with the participants as they advanced through their quit, shaping the way in which they viewed all subsequent interactions with the network members concerned. Reports of negative interactions were, in contrast, rare once the quit had begun, and primarily involved complaints about the quitter's continued irritability or insinuations that the cessation attempt would fail. Interestingly, whilst seven of the ten PIQ negative items relate to behaviours that might occur in the pre-quit phase, only three cover network responses after the participant had given up smoking (*"Comment on your lack of will power"*, *"Express doubt about your ability to quit"*, *"Talk you out of a cigarette"*). Thus, the PIQ-20 may be an appropriate tool for measurement of negative interactions prior to the quit but it seems unlikely that questions about, for instance, pressure to quit will remain relevant further into the stop smoking attempt (a point made by May and West (2000) some 15 years ago). Despite this, many of the studies outlined in Chapter 3 involved completion of the PIQ-20 at multiple time points across the quit. Some, furthermore, found an association between these follow-up assessments of negative interactions and quit outcomes, although these results were largely restricted to concurrent analyses, perhaps suggesting that network members had returned to making complaints about smoking once the participant had relapsed. Whilst less clear cut, the reverse pattern is also somewhat in evidence with regard to the positive scale items, where most questions appear to apply more appropriately to the post-quit phase.

This, in turn, then brings me to the fourth and final aspect of the PIQ-20 that could benefit from revision. In separating out those items that relate to the periods before and after stopping smoking, we can begin to see that the scope of behaviours covered by the PIQ-20 is relatively limited. Here, the majority of pre-quit scale items fall under what Burns et al. (2014) refer to as criticisms of either the act of smoking or of the smokers themselves, with less emphasis being given to behaviours that promote or undermine quitting. In contrast, the post-quit questions deal mainly with emotional and instrumental components of social support, neglecting more instrumental forms of support, despite their apparent relevance to the quitters in this study. Attempts to

encourage smoking, on the other hand, go unmentioned, as do the smoking and quitting behaviours of family and friends.

Taken together, therefore, this analysis of the PIQ-20 highlights the need for an extended data collection instrument that will enable a more in-depth exploration of the relationship between social networks and smoking cessation, one which seeks to better capture quitter subjectivity, one which encompasses a more inclusive definition of the social network, and one which reflects a broader range of network behaviours, whilst at the same time being sensitive to the likely changes in the responses of family and friends over the course of the quit. With this in mind, I propose a new modular instrument, the *Social network & quitting questionnaire (SNAQQ)*, which will provide a more flexible format to realise the necessary modifications. The first such module (Figure 9.2) will look to build a picture of the participant's social network, collecting demographic and smoking status information on the main people within the quitter's network, thereby shifting the focus away from a sole emphasis on the partner.

Social network & quitting questionnaire (SNAQQ): SN mapping

Your social network

Who are the main people in your social network? They could be family, friends, colleagues or people who belong to the same club/society/church as you. Please give details of each person.

Initials:		Smoking status:	Never smoker	<input type="checkbox"/>
Gender:	<input type="checkbox"/> Female	<input type="checkbox"/> Male	Ex-smoker (>12 mths)	<input type="checkbox"/>
Age group:	<input type="checkbox"/> ≤18 yrs	<input type="checkbox"/> 18-29 yrs	Ex-smoker (6-12 mths)	<input type="checkbox"/>
	<input type="checkbox"/> 30-44 yrs	<input type="checkbox"/> 45-64 yrs	Ex-smoker (<6 mths)	<input type="checkbox"/>
	<input type="checkbox"/> ≥65 yrs		Current smoker	<input type="checkbox"/>
Relationship:				

Figure 9.2: SNAQQ: SN mapping module

From here, the baseline module (Figure 9.3) will explore the behaviour of each network member in turn over the weeks immediately prior to the cessation attempt. This module will concentrate on two main areas: family and friends' attitudes to the participant's smoking and plans to quit; and the smoking behaviour and quit intentions of the social network members themselves. A further follow-up module

(Figure 9.4) will then cover network responses post-quit, paying particular attention to aspects of social support for quitting (emotional, instrumental and appraisal) but also encompassing more negative behaviours, such as attempts to encourage smoking or undermine quitting, as well as smoking and quit-related behaviours in the network. Thus, we can see that this revised scale will both take in an extended range of network behaviours and take account of the changing nature of relevant behaviours in the pre- and post-quit periods. The final modification, in contrast, relates to the proposed scoring system for the SNAQQ which will return to the approach used by Mermelstein et al. (1983), where separate ratings are requested in relation to the frequency and helpfulness of each behaviour, reflecting the importance of quitter subjectivity in making sense of their network responses.

In light of these extensive changes, it will next be necessary to test and refine the SNAQQ to ensure its reliability (i.e. that it produces consistent results) and validity (i.e. that it measures what it is intended to measure) on a broader sample of quitters. Such a survey could also usefully consider including non-service as well as service users although, here, recruitment might be a particular challenge, especially given that over a third of quit attempts are unplanned (Murray et al., 2009). This would also provide the opportunity to identify any common patternings across quitters, to explore variations with respect to socio-demographic factors, and to examine associations with quit outcomes, none of which were possible in the current study due to the small number of cases involved. The findings of such a study could, moreover, prove especially helpful in developing our understanding of the reasons for inequalities in smoking cessation. We saw in Chapter 1 that the current tobacco control strategy for Scotland (Scottish Government, 2013) recognises the need to support smokers in their attempts to quit, putting a particular emphasis on helping those from disadvantaged backgrounds. Research suggests that social networks may play an important role here, with several authors finding that smokers from lower socioeconomic groups report higher levels of smoking amongst their family and friends (Hiscock et al., 2015; Hitchman et al., 2014a). A number of other studies, moreover, have also shown that disadvantaged smokers are less likely to be pressurised to quit by family and friends, and less likely to be supported in their efforts to give up smoking by members of their social network (Edwards et al., 2007; Sorensen et al., 2002); it is as yet unclear, however, what impact, if any, the ban on smoking in enclosed public spaces (Scottish Executive, 2005) may have on network attitudes to cessation across different socioeconomic groupings in Scotland.

Social network & quitting questionnaire (SNAQQ): Baseline

Social network reaction to your smoking & plans to quits

For each of the people in your network, please tick which of the following things they have said or done in relation to your smoking or quitting over the last 4 weeks. Did you find these behaviours helpful or unhelpful [0 = unhelpful, 1 = neither unhelpful nor helpful, 2 = helpful]?

	Behaviour	Helpfulness		Behaviour	Helpfulness
Criticising smoking			Undermining quitting		
Commented that smoking is a dirty habit	<input type="checkbox"/>	<input type="checkbox"/>	Commented on your lack of will power	<input type="checkbox"/>	<input type="checkbox"/>
Commented the house smells of smoke	<input type="checkbox"/>	<input type="checkbox"/>	Complained quitting will make you irritable	<input type="checkbox"/>	<input type="checkbox"/>
Refused to let you smoke in the house	<input type="checkbox"/>	<input type="checkbox"/>	Tried to dissuade you from quitting	<input type="checkbox"/>	<input type="checkbox"/>
Mentioned being bothered by smoke	<input type="checkbox"/>	<input type="checkbox"/>	Suggested that quitting is a waste of time	<input type="checkbox"/>	<input type="checkbox"/>
Criticised your smoking	<input type="checkbox"/>	<input type="checkbox"/>	Expressed doubts about your ability to quit	<input type="checkbox"/>	<input type="checkbox"/>
Promoting quitting					
Pressurised you to quit smoking	<input type="checkbox"/>	<input type="checkbox"/>			
Asked you to quit smoking	<input type="checkbox"/>	<input type="checkbox"/>			
Encouraged you to quit smoking	<input type="checkbox"/>	<input type="checkbox"/>			
Expressed confidence in your ability to quit	<input type="checkbox"/>	<input type="checkbox"/>			
Congratulated you for your decision to quit smoking	<input type="checkbox"/>	<input type="checkbox"/>			

Social network smoking & quitting behaviours (current smokers only)

When they are with you, where do they smoke?		Do you know if they have any plans to quit?	
Smokes anywhere	<input type="checkbox"/>	Planning to quit with me	<input type="checkbox"/>
Smokes in a specific room	<input type="checkbox"/>	Planning to quit in the next 6 months	<input type="checkbox"/>
Smokes outside	<input type="checkbox"/>	Talking about quitting in future	<input type="checkbox"/>
Never smokes when with you	<input type="checkbox"/>	Has no intention of quitting	<input type="checkbox"/>
		Do not know	<input type="checkbox"/>

Figure 9.3: SNAQQ: Baseline module

Social network & quitting questionnaire (SNAQQ): Follow-up

For each of the people in your network, please tick which of the following things they have said or done in relation to your quitting over the last 4 weeks. Did you find these behaviours helpful or unhelpful [0 = unhelpful, 1 = neither unhelpful nor helpful, 2 = helpful]?

Social network reaction to your quit attempt

	Behaviour	Helpfulness		Behaviour	Helpfulness
Encouraging smoking			Instrumental support		
Pressurised you to smoke	<input type="checkbox"/>	<input type="checkbox"/>	Talked you out of smoking a cigarette	<input type="checkbox"/>	<input type="checkbox"/>
Encouraged you to smoke	<input type="checkbox"/>	<input type="checkbox"/>	Helped you think of substitutes for smoking	<input type="checkbox"/>	<input type="checkbox"/>
Offered you a cigarette/roll-up	<input type="checkbox"/>	<input type="checkbox"/>	Helped you to use substitutes for smoking	<input type="checkbox"/>	<input type="checkbox"/>
Undermining quitting			Bought you an e-cigarette	<input type="checkbox"/>	<input type="checkbox"/>
Complained quitting is making you irritable	<input type="checkbox"/>	<input type="checkbox"/>	Participated in an activity to keep you from smoking (e.g. going for a walk)	<input type="checkbox"/>	<input type="checkbox"/>
Suggested that quitting is a waste of time	<input type="checkbox"/>	<input type="checkbox"/>			
Commented on your lack of will power	<input type="checkbox"/>	<input type="checkbox"/>			
Expressed doubts about your ability to stay quit	<input type="checkbox"/>	<input type="checkbox"/>			
Emotional support			Appraisal support		
Complimented you on not smoking	<input type="checkbox"/>	<input type="checkbox"/>	Checked that you've not smoked	<input type="checkbox"/>	<input type="checkbox"/>
Celebrated your quitting with you	<input type="checkbox"/>	<input type="checkbox"/>	Reminded you not to smoke again	<input type="checkbox"/>	<input type="checkbox"/>
Expressed pleasure at your efforts to quit	<input type="checkbox"/>	<input type="checkbox"/>	Highlighted your specific achievements	<input type="checkbox"/>	<input type="checkbox"/>
Empathised with what you're going through	<input type="checkbox"/>	<input type="checkbox"/>	Praised you in general (e.g. doing well)	<input type="checkbox"/>	<input type="checkbox"/>
Helped calm you down when you're feeling stressed or irritable	<input type="checkbox"/>	<input type="checkbox"/>	Expressed confidence in your ability to stay quit	<input type="checkbox"/>	<input type="checkbox"/>

Social network smoking & quitting behaviours (current or recent smokers only)

	Behaviour	Helpfulness		Behaviour	Helpfulness
When they are with you, have they?			Have their smoking habits changed?		
Smoked in front of you	<input type="checkbox"/>	<input type="checkbox"/>	Talked to you about cutting down	<input type="checkbox"/>	<input type="checkbox"/>
Smoked out of your sight (indoors)	<input type="checkbox"/>	<input type="checkbox"/>	Cut down on the amount they smoke	<input type="checkbox"/>	<input type="checkbox"/>
Smoked out of your sight (outdoors)	<input type="checkbox"/>	<input type="checkbox"/>	Talked to you about quitting	<input type="checkbox"/>	<input type="checkbox"/>
Never smoked when with you	<input type="checkbox"/>	<input type="checkbox"/>	Stopped smoking completely	<input type="checkbox"/>	<input type="checkbox"/>
			Returned to smoking after a period of quitting	<input type="checkbox"/>	<input type="checkbox"/>

Figure 9.4: SNAQQ: Follow-up module

9.4.3 Improving interventions

This, then, finally brings me to some brief reflections on the implications for our approach to smoking cessation interventions (Objective 5). The wealth of observational research outlined in Chapter 3 has led many authors to implement interventions that have sought to enhance social support in an attempt to improve quit outcomes. These interventions have typically focused on externally manipulating the social network in some way, often involving the identification of a support partner (e.g. spouse, friend or colleague) who is provided with cessation-related information, advice or training. Reviews such as that by Park et al. (2012) have shown, however, that these interventions have been largely unsuccessful, although the relatively small sample sizes and the associated lack of power may have limited the extent to which these interventions could be thoroughly tested. Beyond these statistical considerations, May and West (2000) and Westmaas et al. (2010) have put forward a number of possible explanations for these disappointing results, including: (1) ‘ceiling effects’ whereby the quitters’ support needs are already being met by the behavioural support components of existing interventions programmes; (2) the virtual exclusion of quitters who are either socially isolated or from communities in which the smoking prevalence is high because of a need to identify a partner who is prepared to provide quit-related support; (3) the suitability of the nominated support partners, with debate around the difficulties of changing existing relationships, the likely longevity of newly created ties, and the smoking status of the chosen partners; and (4) the lack of a clear theoretical base for much of the work (like social network and cessation research more generally), which hinders the development and testing of interventions, making it difficult to draw conclusions about the reasons for success or failure. Whilst efforts to address these issues may help in the development of more effective interventions, I venture that there are also two more fundamental issues to be considered. On the one hand, these ‘partner support’ modes of intervention focus on a sole member of the social network, thus overlooking the potentially complex set of quit-related behaviours that might occur across the breadth of the network and, on the other, they involve a somewhat top-down approach in which an attempt is made to ‘fix’ the quitter’s social network. The current study, in contrast, suggests that we may be better placed to view the quitter as being the expert on their social network, seeking instead to find ways in which we can support them in navigating and managing their social network more effectively. It is, perhaps, too soon to say exactly what form such

interventions might take; the studies proposed above will be invaluable here since they will provide a greater insight into the processes of subjective meaning and dynamic interaction, as well as into the patterning of meaning, agency and change across individuals. One possible approach is that adopted by Bottorff et al. (2008), as part of the wider FACET (Families Controlling and Eliminating Tobacco) programme. Building on their work in relation to tobacco-related interaction patterns (Bottorff et al., 2005, 2006), they produced a leaflet aimed at helping pregnant women to understand how they interacted with their partners around smoking on a day-to-day basis, giving them suggestions on how they might begin to change these routines. Although not yet evaluated with respect to its impact on quit outcomes, Bottorff's model nevertheless represents a novel approach to social network-based interventions for smoking cessation, one that could be strengthened by encompassing a broader range of social network members, by developing alternative modes of delivery (e.g. social media, self-help groups, and professional support), and by adapting the language to suit a more diverse socio-demographic population.

9.5 Conclusions

In conclusion, this thesis presents a synthesis of my own empirical research, a review and analysis of the literature, together with personal critical reflections on the current state of research on the relationship between social networks and smoking cessation. In this way, my main contributions centre around identifying ways in which existing approaches to the study of the social network can be refined to better reflect the demands of health behaviour change. More specifically, I have shown that we need to refocus our efforts in three particular areas: (1) making increased use of sociological perspectives with respect to network structure in order to better capture its breadth and complexity of organisation; (2) paying greater attention to social influence as a key component of network function, and recognising the bi-directional nature of this process; and (3) extending our conceptual models of the social network beyond the usual structure/function divide to encompass a third dimension of network meaning.

Appendix A

Overview of studies in systematic review

Source	Country	Population	No. participants	SN measure ¹	Focus ²
Baha & Le Faou (2010)	France	Quitters	>=10,000	F	L
Bock et al. (2013)	United States	Quitters	100-249	S	L
Bottorff et al. (2005)	Canada	Quitters	<50	I	M
Bottorff et al. (2006)	Canada	Quitters	<50	I	M
Broms et al. (2004)	Finland	Smokers	1000-4999	S	L
Brothers & Borrelli (2010)	United States	Quitters	100-249	S & F	L & M
Burns et al. (2014)	United States	Quitters	250-499	F	M
Chandola et al. (2004)	United Kingdom	Smokers	>=10,000	S & F	L & M
Christakis & Fowler (2008)	United States	Smokers	>=10,000	S	L & M
Cobb et al. (2014)	United States	Smokers	1000-4999	S	L
Cohen & Lichtenstein (1990)	United States	Quitters	100-249	S, F & I	L & M
Collins et al. (1990)	United States	Quitters	100-249	F	L
Coppotelli & Orleans (1985)	United States	Quitters	100-249	S & F	L
Danaher et al. (2009)	United States	Quitters	250-499	S, F & I	L & M
Dollar et al. (2009)	United States	Smokers	500-999	S	L
Falba & Sindelar (2008)	United States	Smokers	1000-4999	S	L
Franks et al. (2002)	United States	Smokers	1000-4999	S	L
Ginsberg et al. (1991)	United States	Quitters	<50	S & F	L & M

¹ S: Structure; F: Function; I: Interactions & meaning

² L: Establishing a link; M: Understanding mechanisms

Figure A.1: Summary of 65 studies in systematic review

(cont.)

Source	Country	Population	No. participants	SN measure ¹	Focus ²
Glasgow et al. (1985)	United States	Quitters	100-249	S & F	L
Greenwood et al. (1995)	United Kingdom	Smokers	500-999	S	L
Gulliver et al. (1995)	United States	Quitters	500-999	F	L
Hanson et al. (1990)	Sweden	Smokers	500-999	S & F	L
Hill Rice et al. (1996)	United States	Quitters	100-249	S & F	L
Hitchman et al. (2014b)	Australia, Canada, UK & USA	Smokers	5000-9999	S	L
Homish & Leonard (2005)	United States	Smokers	250-499	S	L
Jarvis (1996)	United Kingdom	Smokers	>=10,000	S	L
Kashigar et al. (2013)	Canada	Smokers	250-499	S & F	L
Kavanagh et al. (1993)	Australia	Quitters	100-249	F	L
Koshy et al. (2010)	United Kingdom	Smokers & quitters	<50	S, F & I	M
Kriegbaum et al. (2011)	Denmark	Smokers	5000-9999	S	L
Lawhon et al. (2009)	United States	Quitters	500-999	F	L
Lichtenstein et al. (2002)	United States	Quitters	250-499	F & I	L & M
Lindstrom et al. (2000)	Sweden	Smokers	5000-9999	S & F	M
Loke et al. (2012)	Hong Kong	Smokers	50-99	F	L
Luscher et al. (2015)	Switzerland	Quitters	100-249	F & I	L & M
Manchon Walsh et al. (2007)	Spain	Quitters	1000-4999	S	L
May et al. (2007)	United Kingdom	Quitters	500-999	S & F	L
McBride et al. (1998)	United States	Quitters	500-999	S & F	L & M
Mermelstein et al. (1983)	United States	Quitters	<50	F	L
Mermelstein et al. (1986)	United States	Quitters	100-249	S & F	L
Monden et al. (2003)	Netherlands	Smokers	500-999	S	L
Murray et al. (1995)	United States	Quitters	1000-4999	S	L

¹ S: Structure; F: Function; I: Interactions & meaning² L: Establishing a link; M: Understanding mechanisms

(cont.)

Source	Country	Population	No. participants	SN measure ¹	Focus ²
Nguyen et al. (2012)	United States	Quitters	<50	I	M
Nollen et al. (2005)	United States	Quitters	250-499	F	L
Ochsner et al. (2014)	Switzerland	Quitters	50-99	F	M
Ochsner et al. (2015)	Switzerland	Quitters	50-99	F	M
Ockene et al. (1982)	United States	Smokers	500-999	S & F	L
Okechukwu et al. (2010)	United States	Quitters	1000-4999	S & F	L
Osler & Prescott (1998)	Denmark	Smokers	1000-4999	S	L
Ota et al. (2012)	Japan	Smokers	500-999	S	L
Pollak & Mullen (1997)	United States	Quitters	50-99	S & F	L & M
Pollak et al. (2001)	United States	Smokers & quitters	50-99	I	M
Pollak et al. (2006a)	United States	Quitters	250-499	S, F & I	M
Pollak et al. (2006b)	United States	Quitters	250-499	S & F	M
Rohrbaugh et al. (2009)	United States	Smokers & quitters	<50	F	M
Roski et al. (1996)	United States	Quitters	500-999	F	L & M
Ross et al. (2013)	Denmark	Smokers	>=10,000	S & F	L
Sun et al. (2009)	China	Quitters	100-249	S	L
Takagi et al. (2014)	Japan	Smokers	1000-4999	S	M
Tsang et al. (2014)	United States	Smokers & quitters	<50	I	M
Turner et al. (2008)	United States	Smokers & quitters	1000-4999	F	M
Wakefield et al. (1998)	Australia	Smokers	<50	I	M
Wang et al. (2014)	Taiwan	Quitters	<50	I	M
Weden & Kimbro (2007)	United States	Smokers	1000-4999	S	L & M
Zhang et al. (2012)	China	Smokers & quitters	<50	I	M

¹ S: Structure; F: Function; I: Interactions & meaning² L: Establishing a link; M: Understanding mechanisms

Appendix B

Study documentation

Appendix B.1: Interview topic guide

Appendix B.2: Participant information sheet

Appendix B.3: Preliminary consent form

Appendix B.4: Main consent form

Appendix B.5: Ethical approval letters

B.1 Interview topic guide

The role of family and friends in giving up smoking Interview topic guide



Initial interview: all participants

Start with a couple of background questions - how old are you?

- ▶ What do you do for a living?
- ▶ Who do you live with?
- ▶ Do you have any children? How many? What age?

Can you tell me what a typical day is like for you?

- ▶ Start at the beginning - in as much detail as you like.
- ▶ Where do you go and what do you do?
- ▶ Who do you spent time with?

Can you describe your smoking habits to me - before you gave up?

- ▶ How many cigarettes did you smoke a day?
- ▶ Was this more or less the same everyday - or did it vary quite a lot?
- ▶ How old were you when you started? How many years have you been smoking?
- ▶ Have you ever tried giving up smoking before? How many times? How long ago was your last attempt?

Mapping of family and friends:

- ▶ Participants will be asked to write down the names of close family, friends and work colleagues on post-its, using a different colour for each network category.
- ▶ They will then be asked to organise these post-its into groups of people who all know each other, and to mark out current and ex-smokers.
- ▶ No particular format will be specified for this mapping; participants are free to arrange the groups in whatever way makes sense to them.

Looking at the map of your family and friends, was there anyone in particular that you used to smoke with?

- ▶ Were there any particular places that you used to smoke?
- ▶ And any particular times when you perhaps smoked more - or less?

Can you tell me about how you came to the decision to quit?

- ▶ Did you talk to anyone in particular about it? What did they say?
- ▶ Was there anybody that you avoided mentioning it to? Why was that?

Can you tell me about the day that you actually quit?

- ▶ Where did you go and what did you do?
- ▶ Who did you see? Did you tell them that you'd given up? What did they do and say? Did they smoke around you? How did you feel about that?
- ▶ Were there any particular people or places that you avoided?

Can I just check whether you've still given up?

- ▶ If yes, have you smoked at all since you quit? When was the last time?
- ▶ If no, when did you start again? How many are you now smoking a day?

Interview topic guide: version 1.4, 20/07/2012
Protocol Ref: ces_socnet_prot_v1.3

Initial interview: non-smokers

How are you finding not smoking?

- ▶ What have you found most difficult about not smoking?
- ▶ What, if anything, have you found easy about not smoking?
- ▶ Have there been any benefits to not smoking? Any downsides?

Can you tell me about any times when you've felt you've really needed a cigarette?

- ▶ Where were you and what were you doing?
- ▶ Who were you with? What did they do and say? Were they smoking?
- ▶ Did you smoke? If yes, how do you feel about that? If no, what stopped you?

How have your family and friends reacted to you not smoking?

- ▶ Has anyone been particularly helpful? Or unhelpful?
- ▶ Do they continue to smoke around you? How do you feel about that? How do you handle not smoking when they are?
- ▶ Has anybody made an effort not to smoke around you?
- ▶ What tips, if any, has your stop smoking advisor given you on handling your family and friends? Were the tips useful? Would you suggest anything else?
- ▶ Would you have liked to take someone with you to the stop smoking clinic? Who?

Have the people you spend time with changed at all since you gave up?

- ▶ Do you still see the same people? Go to the same places? Do the same things?
- ▶ Have people changed what they do and say around you?
- ▶ Do you feel cut-off from anyone? Who, and in what way?
- ▶ Do you spend time with other people instead? What do you do together?

What do you think has helped you most in staying quit?

- ▶ Do you think your family and friends have been important?
- ▶ Is there anything that might have made it easier?
- ▶ Are you going to do anything differently over the next few months?

Initial interview: relapsers

How did you find it - when you weren't smoking?

- ▶ What did you find most difficult about not smoking?
- ▶ What, if anything, did you find easy about not smoking?
- ▶ Were there any benefits to not smoking? Any downsides?

Can you tell me about any times - before you started smoking again - that you felt you really needed a cigarette?

- ▶ Where were you and what were you doing?
- ▶ Who were you with? What did they do and say? Were they smoking?
- ▶ Did you smoke? If yes, how did you feel about that? If no, what stopped you?

How did your family and friends react to you not smoking?

- ▶ Was anyone particularly helpful? Or unhelpful?
- ▶ Did they continue to smoke around you? How did you feel about that? How did you handle not smoking when they were?
- ▶ Did anybody make an effort not to smoke around you?

- What tips, if any, did your stop smoking advisor give you on handling your family and friends? Were the tips useful? Would you suggest anything else?
- Would you have liked to take someone with you to the stop smoking clinic? Who?

Did the people you spent time with change at all when you weren't smoking?

- Did you still see the same people? Go to the same places? Do the same things?
- Did people change what they did and said around you?
- Did you feel cut-off from anyone? Who, and in what way?
- Did you spend time with other people instead? What did you do together?

Can you tell me about the time you started smoking again?

- Where were you and what were you doing? Who were you with? How did they react?
- What was it that made you start smoking again?
- How do you feel about the fact that you're smoking again?
- Is there anything you think might have helped you stay quit?
- Do you think you'll have another go? Will you do anything differently next time?

Follow-up interview: all participants

How have things been since we last met - any major changes in your life?

- Are you still in the same job?

Can I just check whether you've still given up?

- If yes, have you smoked at all since we met last? When was the last time?
- If no, when did you start again? How many are you now smoking a day?

Follow-up interview: non-smokers

How are you finding not smoking?

- What have you found most difficult about not smoking?
- What, if anything, have you found easy about not smoking?
- Have there been any benefits to not smoking? Any downsides?

Can you tell me about any times recently when you've felt you've really needed a cigarette?

- Where were you and what were you doing?
- Who were you with? What did they do and say? Were they smoking?
- Did you smoke? If yes, how do you feel about that? If no, what stopped you?

Have you ever found yourself thinking I've got it sorted now - one won't hurt?

- Where were you and what were you doing?
- Who were you with? What did they do and say? Were they smoking?
- Did you smoke? If yes, how do you feel about that? If no, what stopped you?

Has the reaction of your family and friends changed at all?

- Has anyone been particularly helpful? Or unhelpful?
- Do they continue to smoke around you? How do you feel about that? How do you handle not smoking when they are?
- Has anybody made an effort not to smoke around you?
- What tips, if any, has your stop smoking advisor given you on handling your family and friends? Were the tips useful? Would you suggest anything else?
- Would you have liked to take someone with you to the stop smoking clinic? Who?

Have the people you spend time with changed at all?

- Do you still see the same people? Go to the same places? Do the same things?
- Have people changed what they do and say around you?
- Do you feel cut-off from anyone? Who, and in what way?
- Do you spend time with other people instead? What do you do together?

What do you think has helped you most in staying quit?

- Do you think your family and friends have been important?
- Is there anything that might have made it easier?
- Are you going to do anything differently over the next few months?

Follow-up interview: relapsers**How did you find it - when you weren't smoking?**

- What did you find most difficult about not smoking?
- What, if anything, did you find easy about not smoking?
- Were there been any benefits to not smoking? Any downsides?

Can you tell me about any times - before you started smoking again - that you felt you really needed a cigarette?

- Where were you and what were you doing?
- Who were you with? What did they do and say? Were they smoking?
- Did you smoke? If yes, how did you feel about that? If no, what stopped you?

Did you ever find yourself thinking I've got it sorted now - one won't hurt?

- Where were you and what were you doing?
- Who were you with? What did they do and say? Were they smoking?
- Did you smoke? If yes, how did you feel about that? If no, what stopped you?

Did the reaction of your family and friends change at all before you started smoking again?

- Was anyone particularly helpful? Or unhelpful?
- Did they continue to smoke around you? How did you feel about that? How did you handle not smoking when they were?
- Did anybody make an effort not to smoke around you?
- What tips, if any, did your stop smoking advisor give you on handling your family and friends? Were the tips useful? Would you suggest anything else?
- Would you have liked to take someone with you to the stop smoking clinic? Who?

Did the people you spent time with change at all before you started smoking again?

- Did you still see the same people? Go to the same places? Do the same things?
- Did people change what they did and said around you?
- Did you feel cut-off from anyone? Who, and in what way?
- Did you spend time with other people instead? What did you do together?

Can you tell me about the time you started smoking again?

- Where were you and what were you doing? Who were you with? How did they react?
- What was it that made you start smoking again?
- How do you feel about the fact that you're smoking again?
- Is there anything you think might have helped you stay quit?
- Do you think you'll have another go? Will you do anything differently next time?

B.2 Participant information sheet

The role of family and friends in giving up smoking Participant information sheet



Part 1: Can you help?

My name is Caroline Smith and I'm a PhD student at the University of Edinburgh. I would like to invite you to take part in the above research study. This information sheet will help you to understand why the research is being done and what it will involve for you. Your stop smoking advisor will go through it with you and answer any questions you have. This should take a couple of minutes.

Part 2: About the research study

What is the study about?

Lots of people try to give up smoking with help from NHS stop smoking services. Many are successful but not everybody is and it's important to work out how they can be helped more. I'm interested in finding out what family and friends do when someone is trying to quit and whether they make it easier or harder.

Why have I been invited?

All smokers between the ages of 25 and 64 who try and quit with help from an NHS stop smoking service in the Forth Valley area can take part. You've been invited because you are attending one of these services.

What will I have to do during the study?

Meet with me one or two times and tell me what trying to give up was really like - and what other people said and did. We'll also put together a map of your friends and family so that I know who's who.

Where we meet is up to you - it could be at your home, a local café or somewhere else near to where you live. Our first chat will be a week or so after your quit date and will last for about an hour. I'd also like to meet up again 3 months later to see how you're getting on. With your permission, I'll be recording our chats so that I can listen to them again later and transcribe them. If you prefer, I will take notes instead.

Do I have to take part?

No. It is entirely up to you if you want to join in. You are also free to leave the study at any time, including during the interview itself, and there is no need to give a reason. You can also choose not to answer particular questions. Your decision will not affect the help you receive from the stop smoking service.

Does it matter if I've started smoking again?

No. I'm interested in what makes people start smoking again as well as in what helps them stay quit.

Are there any benefits to taking part?

There are no direct benefits to you in taking part. However, to show my appreciation for you giving up your time, you will get a £5 gift voucher if you take part in the first interview, plus a £10 voucher if you take part in the second.

Who will know that I've taken part?

Your stop smoking advisor will be aware that you were interested in taking part but only I will know whether you actually did. If you prefer to meet me at your home, I will need to give your contact details to CRYISIS, a safety monitoring service for researchers.

Will anyone be able to find out what I said?

Anonymised versions of the interview will be shared with my University supervisors (and possibly a transcription company) but they will not know who you are. If you give me permission, I would like to be able to quote you directly (again anonymously) in any reports or presentations.

How will my data be stored?

All paper files relating to our discussions will be stored in a locked filing cabinet at the University of Edinburgh. Electronic copies will be held in password-protected files. I will destroy all these files once I have finished my PhD thesis and any other publications.

What will happen to the results of the study?

I'll be writing up the results in my PhD thesis and I can send you a summary if you would like. I'm also hoping to present the findings at scientific conferences and in academic journals.

Part 3: Who should I contact if I have a question or problem?

I am the main contact person for this study. Please don't hesitate to ask if you have any more questions. You can call me on 0131 650 3039 (University)/07890 798849 (mobile) or e-mail me at C.E.Smith-3@sms.ed.ac.uk.

To make sure your interests are protected, this study has been reviewed and passed by the South Central - Portsmouth Research Ethics Committee. If you want to talk to someone about any concerns you have, or to make a complaint, then please contact: Professor Amanda Amos, Public Health Sciences, University of Edinburgh, EH8 9AG. Tel: 0131 650 3236, e-mail: Amanda.Amos@ed.ac.uk.


Part 4: What happens next?

If you decide you might like to take part, your stop smoking advisor will ask you to complete a brief form, giving your contact information and a few details about yourself (e.g. age) so that I can make sure I get a good mix of people. This form will be sent to me, and I will then get in touch after a couple of days to see if you have any more questions and to fix a time for me to come and see you. Before the interview, I'll ask you to sign a consent form so I can be absolutely sure you're happy to take part.

Thanks for taking the time to consider this study!

B.3 Preliminary consent form

The role of family and friends in giving up smoking
Preliminary contact form



If you are interested in taking part in the above research study, please read and complete the following contact form.

Date quit smoking (dd/mm/yy): / /

I am happy for my contact details to be passed to the study researcher at the University of Edinburgh: ☐ Yes ☐ No

I would prefer to be contacted by:

Phone: ☐ Phone number:

Text: ☐

E-mail: ☐ E-mail address:

It would be really helpful if you could also provide the following details so that we can make sure we have a good mix of people taking part:

Gender: ☐ Female ☐ Male

Age group: ☐ 25-44 years ☐ 45-64 years

First part of your postcode (e.g. FK10 1):


Name in block capitals:

Signed (interviewee): Date:

Preliminary consent form: version 1.3, 23/10/2012
 Protocol Ref: ces_socnet_prot_v1.3

B.4 Main consent form

The role of family and friends in giving up smoking
Main consent form



If you are happy to take part in the above research study, please read and complete the following consent form.

In signing the declaration below, I am declaring that I (please initial the boxes next to each point to show you agree):

- ▶ have read the participant information sheet (version 1.7, date: 23/10/12); ☐
- ▶ have had the opportunity to ask questions about the study and have received satisfactory answers to the questions, and any additional details requested; ☐
- ▶ understand that I may withdraw from the study at any time by advising the researcher of this decision; ☐
- ▶ understand that only the main researcher will have full access to my data but that anonymised copies of my interview(s) will be shared with her supervisors (and possibly a transcription company); ☐
- ▶ understand that, if I decide to be interviewed at home, my contact details will be passed to CRYISIS, a safety monitoring service for researchers; ☐
- ▶ understand that my data will be held securely at the University of Edinburgh, and then destroyed once the study is written up and published; ☐
- ▶ agree to participate in the study. ☐

I am happy for the interview to be digitally recorded: ☐ Yes ☐ No

I am happy to be quoted anonymously in any publications or presentations arising from the study: ☐ Yes ☐ No

Name in block capitals:


Signed (interviewee): Date:

Signed (interviewer): Date:

1 copy for participant, 1 copy for researcher

Main consent form: version 1.5, 23/10/2012
Protocol Ref: ces_socnet_prot_v1.3

B.5 Ethical approval letters

		 Health Research Authority
		NRES Committee South Central - Portsmouth Bristol Research Ethics Committee Centre Level 3, Block B Whitefriars Lewins Mead Bristol BS1 2NT
		Telephone: 0117 342 1382 Facsimile: 0117 342 0445
30 August 2012		
Mrs Caroline E. Smith PhD Researcher University of Edinburgh Centre for Population Health Sciences Medical School, Teviot Place Edinburgh EH8 9AG		
Dear Mrs Smith		
Study title:	The role of family and friends in giving up smoking: a qualitative study of social networks among disadvantaged smokers.	
IRAS Project Reference:	105038	
REC reference:	12/SC/0506	
Protocol number:	N/A	
The Proportionate Review Sub-committee of the NRES Committee South Central - Portsmouth reviewed the above application in correspondence.		
Ethical opinion		
The committee questioned whether enough time had been allowed for the initial interview		
You responded that you were keen to avoid overburdening participants with an excessively long interview and that her supervisor had advised keeping the interviews to an hour. You added that the timings of the family and friends mapping exercise had been tested and found to take approximately 15 to 20 minutes, however you had not been able to pilot the rest of the interview schedule as this would have required ethics approval. You added that the interview schedule is designed as an outline topic guide with overlapping questions and it may not be necessary to ask all of the questions, but you wanted to add sufficient prompts for those participants who are more reticent.		
The committee were satisfied with the researchers response and agreed that there were no further outstanding ethical issues		
On behalf of the Committee, the sub-committee gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.		
Ethical review of research sites		
The favourable opinion applies to all NHS sites taking part in the study, subject to		
<small>A Research Ethics Committee established by the Health Research Authority</small>		

management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at <http://www.rdforum.nhs.uk>.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of approvals from host organisations.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

You should notify the REC in writing once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. Confirmation should also be provided to host organisations together with relevant documentation.

Approved documents

The documents reviewed and approved were:

Document	Version	Date
Evidence of insurance or indemnity		
Interview Schedules/Topic Guides	1.4	20 July 2012
Investigator CV		25 July 2012
Other: CV - Prof Amanda Amos		11 July 2012
Participant Consent Form: ces_socnet_pcons	1.2	20 July 2012
Participant Consent Form: ces_socnet_mcons	1.4	22 August 2012
Participant Information Sheet: ces_socnet_pis	1.6	22 August 2012
Protocol	1.3	25 July 2012
REC application	1.1	22 August 2012

Membership of the Proportionate Review Sub-Committee

The members of the Sub-Committee who took part in the review are listed on the attached sheet.

There were no declarations of interest

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

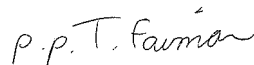
Further information is available at National Research Ethics Service website > After Review

12/SC/0506

Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely



Mrs Jayne Tyler
Vice - Chair

Email: scsha.sehrec@nhs.net

Enclosures: *List of names and professions of members who took part in the review*

"After ethical review – guidance for researchers"

Copy to: *Marianne Laird*
Allyson Bailey, NHS Forth Valley

NRES Committee South Central - Portsmouth

Attendance at PRS Sub-Committee of the REC meeting in correspondence

Committee Members:

<i>Name</i>	<i>Profession</i>
Mrs Angela Iveson	Oncology Research Nurse
Dr Ian McAndrew	Independent EU Consultant/Lecturer
Mrs Jayne Tyler (Vice – Chair)	Senior Fire Control Operator

Also in attendance:

<i>Name</i>	<i>Position (or reason for attending)</i>
Mr Thomas Fairman	Assistant Committee Coordinator



Date: 11 October 2012
Your Ref:
Our Ref:
Direct Line: 01324 677564
Email: allyson.bailey@nhs.net
R&D ref: FV 689

Mrs Caroline E. Smith
University of Edinburgh
Centre for Population Health Sciences
Medical School
Teviot Place
Edinburgh EH8 9AG

Dear Mrs. Smith

Study title: The role of family and friends in giving up smoking: a qualitative study of social networks among disadvantaged smokers
NRES number: 12/SC/0506

Following the favourable opinion from the NRES Committee South Central-Portsmouth on 30 August 2012, I am pleased to confirm that I formally gave Management Approval to the study above on 11 October 2012. This approval is subject to the following conditions:

- Provision of a suitable Letter of Access for you.

This approval is granted subject to your compliance with the following:

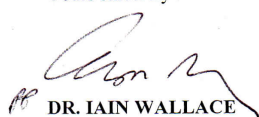
1. Any amendments to the protocol or research team must have Ethics Committee and R&D approval (as well as approval from any other relevant regulatory organisation) before they can be implemented. Please ensure that the R&D Office and (where appropriate) NRS are informed of any amendments as soon as you become aware of them.
2. You and any local Principal Investigator are responsible for ensuring that all members of the research team have the appropriate experience and training, including GCP training if required.
3. All those involved in the project will be required to work within accepted guidelines of health and safety and data protection principles, any other relevant statutory legislation, the Research Governance Framework for Health and Community Care and IHC-GCP guidelines. A copy of the Framework can be accessed via the Chief Scientist Office website at: <http://www.cso.scot.nhs.uk/Publications/ResGov/Framework/RGFEEdTwo.pdf> and ICH-GCP guidelines may be found at <http://www.ich.org/LOB/media/MEDIA482.pdf>
4. As custodian of the information collected during this project you are responsible for ensuring the security of all personal information collected in line with NHS Scotland IT security policies, until the destruction of this data.
5. You or the local Principal Investigator will be required to provide the following reports and information during the course of your study:
 - A progress report **annually**

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- Recruitment numbers on a **monthly** basis (if your study should be added to the NIHR research Portfolio you will receive a separate letter from the R&D Office detailing the steps to be taken)
- Report on SAEs and SUSARs if your study is a Clinical Trial of an Investigational Medicinal Product
- Any information required for the purpose of internal or external audit and monitoring
- Copies of any external monitoring reports
- Notification of the end of recruitment and the end of the study
- A copy of the final report, when available.
- Copies of or full citations for any publications or abstracts

The appropriate forms will be provided to you by the Research and Development office when they are needed. Other information may be required from time to time.

Yours sincerely


DR. IAIN WALLACE
Medical Director

CC: Prof. Amanda Amos
University of Edinburgh
Centre for Population Health Sciences
Medical School
Teviot Place
Edinburgh EH8 9AG

Sheila Wason
Assistant General Manager
Clackmannanshire Community healthcare Centre
1st Floor
Hallpark Road
Sauchie
FK10 3JQ

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Appendix C

Participants' social network mappings



Figure C.1: Nadia

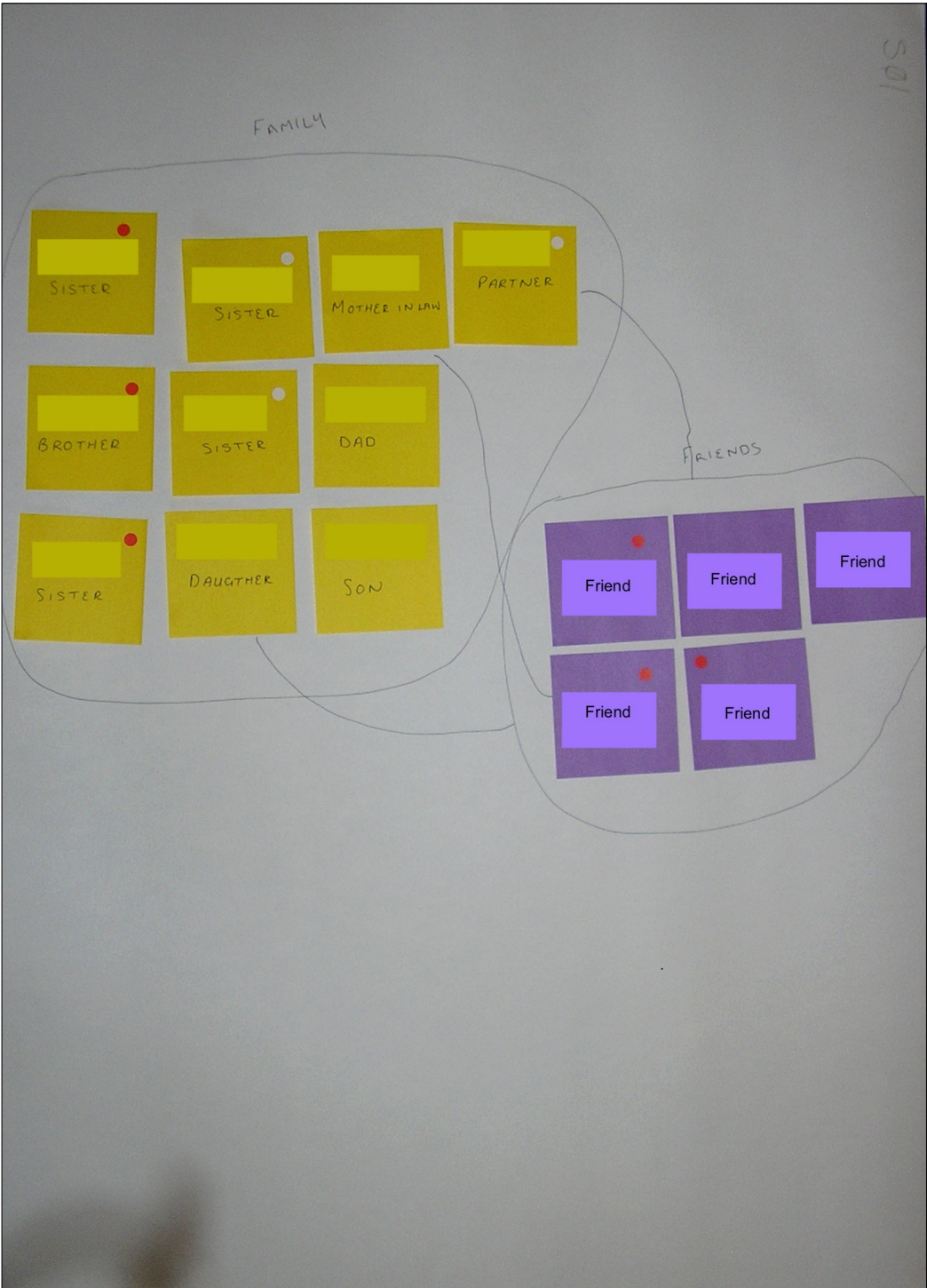


Figure C.2: Paula



Figure C.3: Colette



Figure C.4: Catriona



Figure C.5: Heather

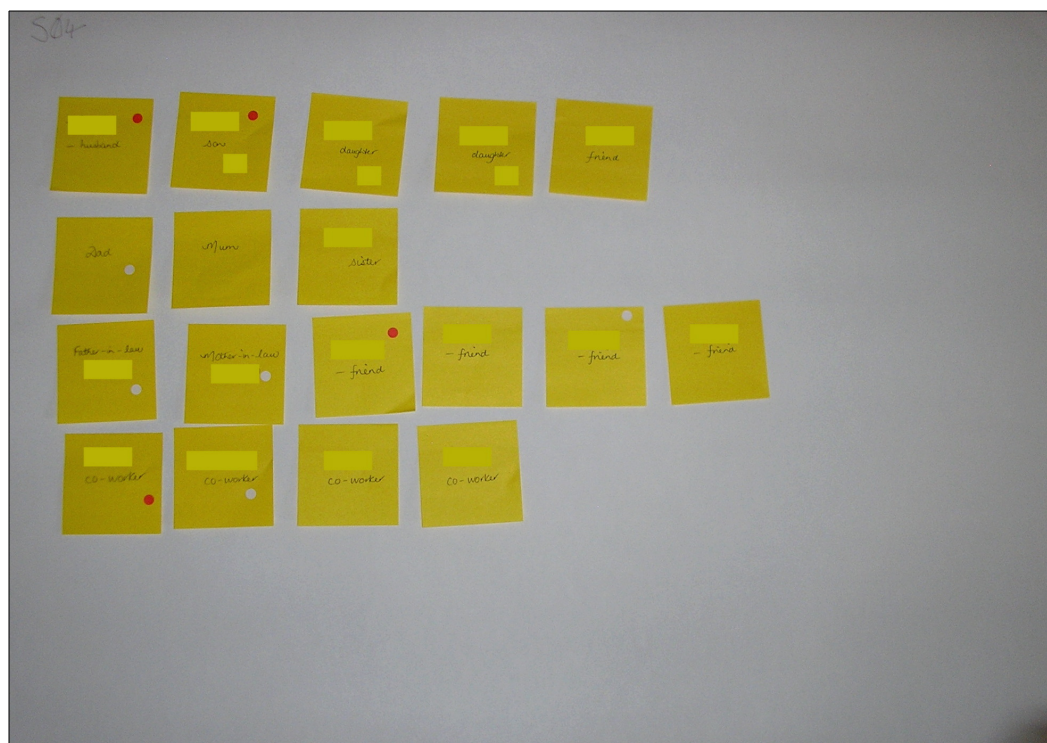
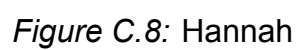
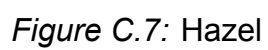


Figure C.6: Lynn



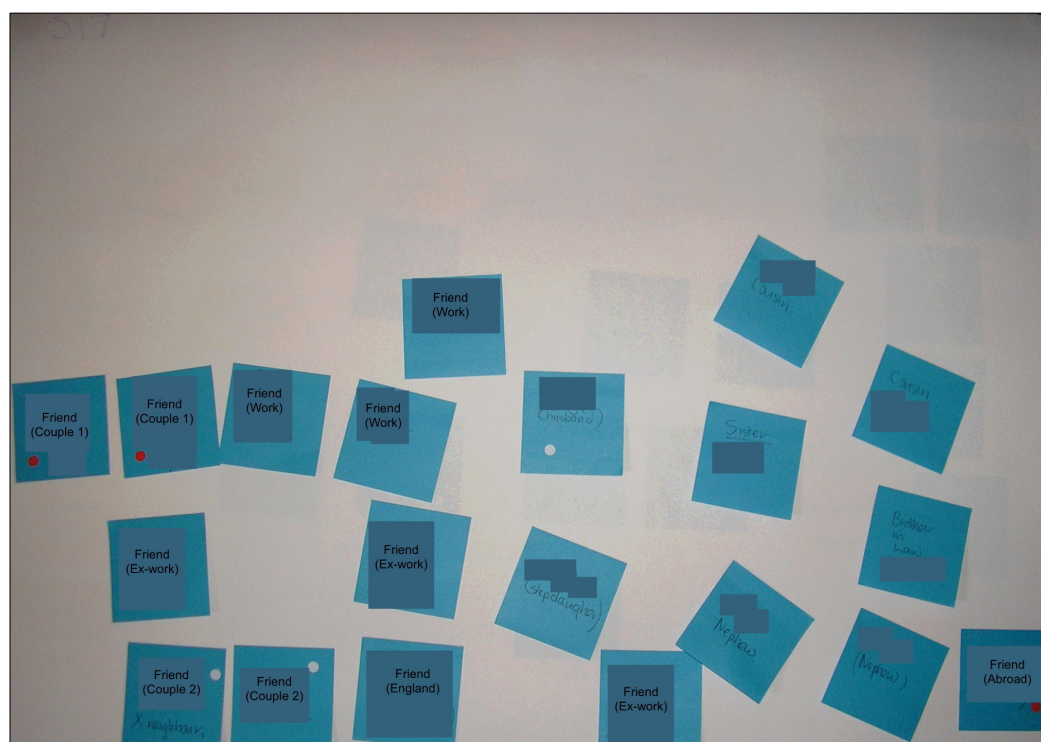


Figure C.9: Sarah

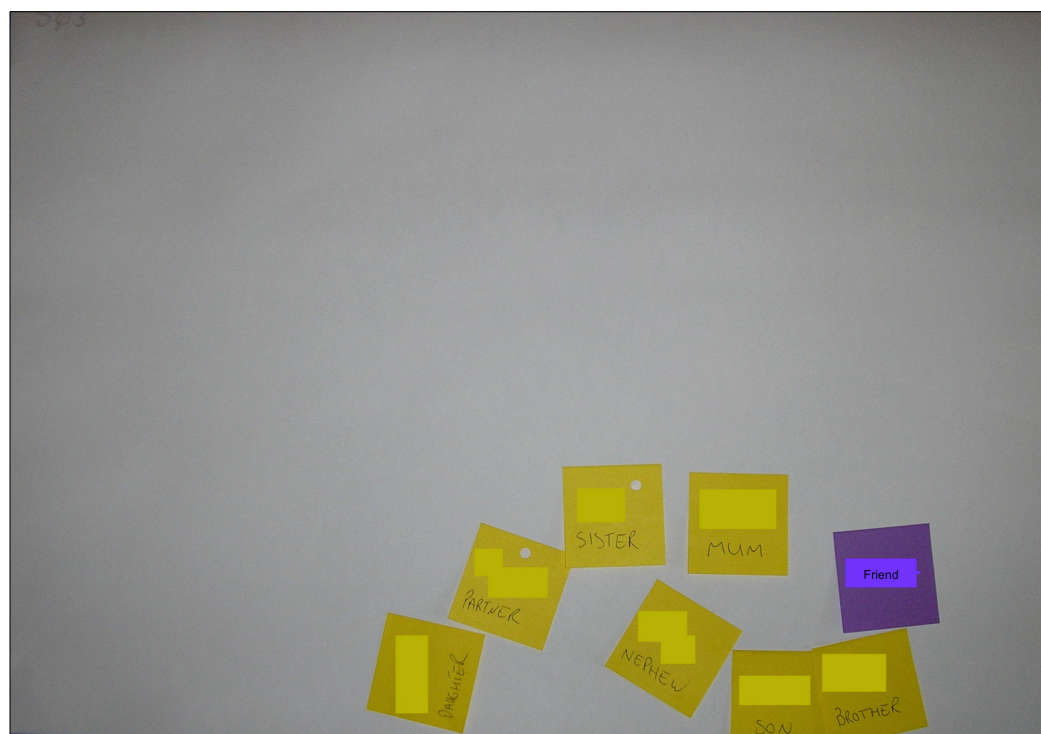


Figure C.10: Alex

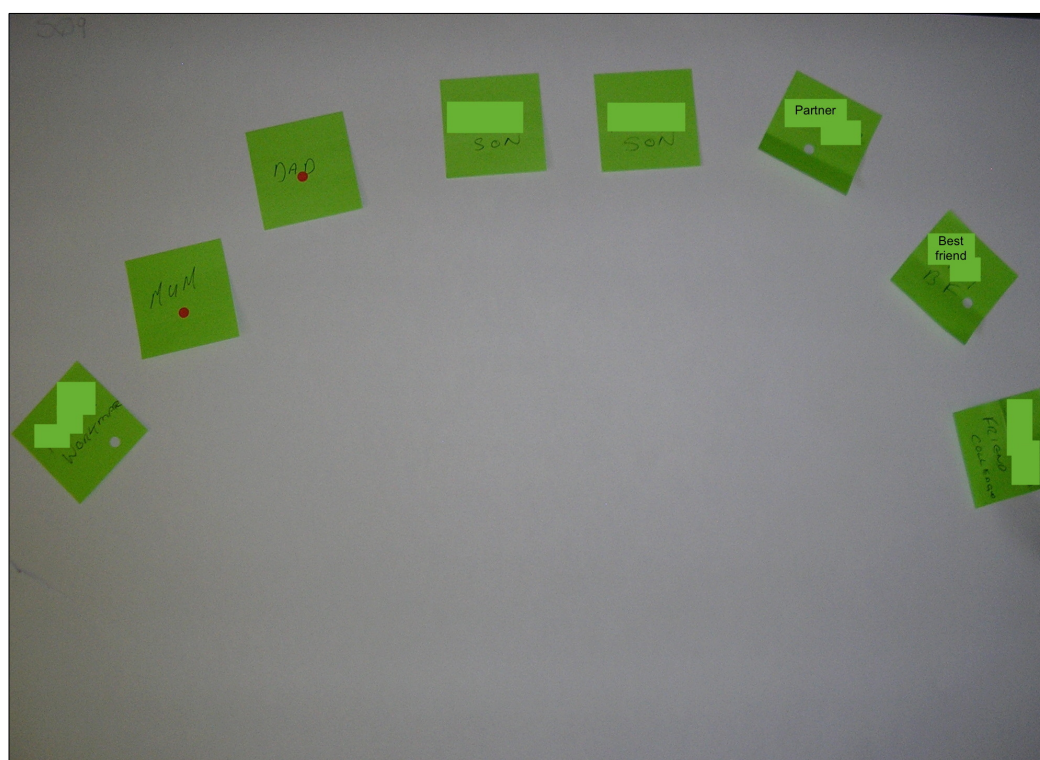
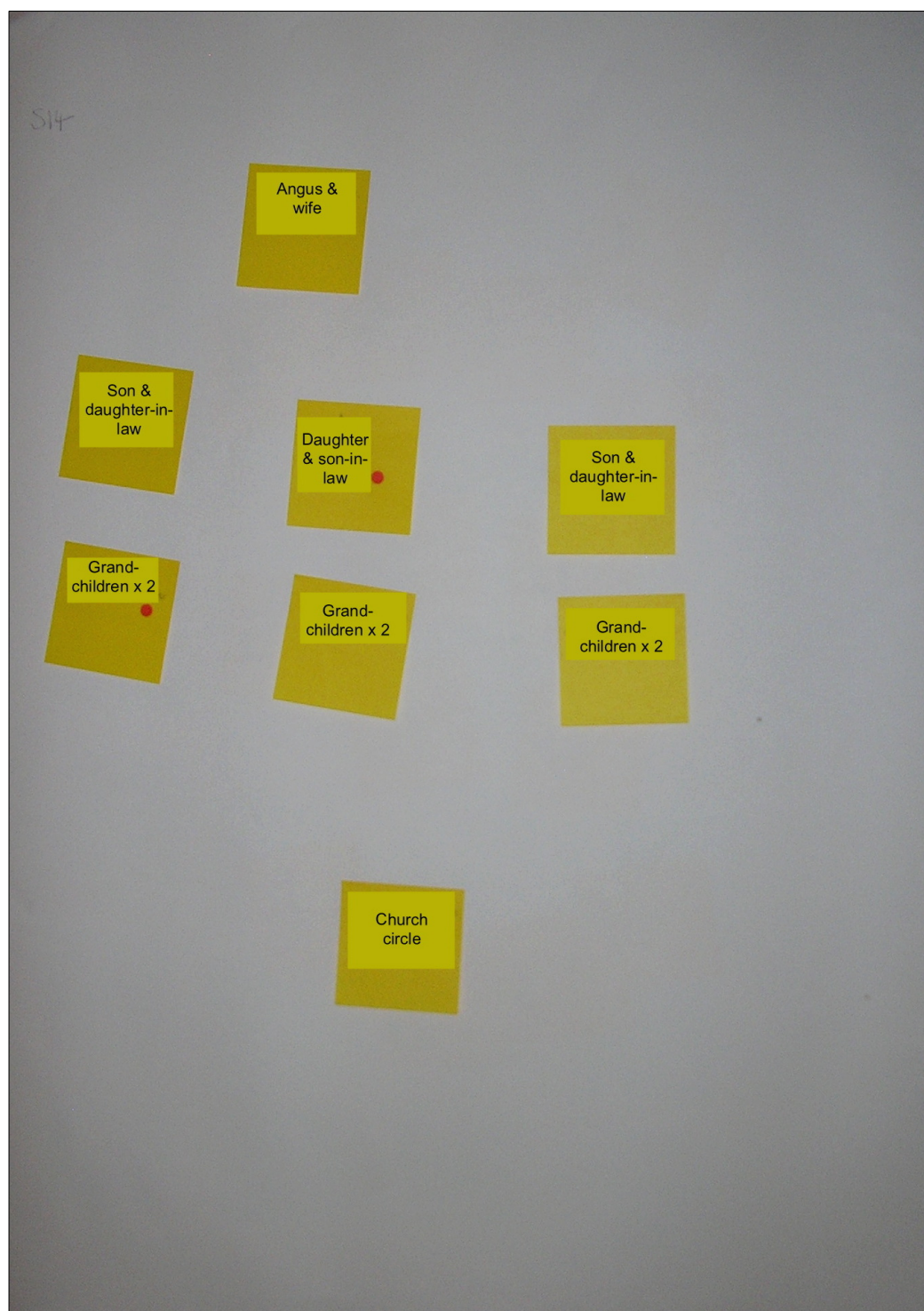


Figure C.11: Dan



Figure C.12: Douglas

*Figure C.13: Angus*

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